

CLICK PLC Overview

PLC Units

The nineteen CLICK PLC units are available with different combinations of built-in I/O types.



Basic PLC

CLICK Basic PLC Units			
Part Number	Inputs (8 points)	Outputs (6 points)	Price
CO-00DD1-D	DC (24 VDC, sink/source)	DC (0.1 A, 5-27 VDC, Sink)	\$69.00
CO-00DD2-D		DC (0.1 A, 24 VDC, Source)	\$69.00
CO-00DR-D		Relay (1 A @ 6-27 VDC/6-240 VAC)	\$79.00
CO-00AR-D	AC (100-120 VAC)		\$79.00

Basic PLC Unit Features:

- Eight discrete input points
- Six discrete output points
- Two RS-232 communications ports



Standard PLC

CLICK Standard PLC Units			
Part Number	Inputs (8 points)	Outputs (6 points)	Price
CO-01DD1-D	DC (24 VDC, sink/source)	DC (0.1 A, 5-24 VDC, Sink)	\$99.00
CO-01DD2-D		DC (0.1 A, 24 VDC, Source)	\$99.00
CO-01DR-D		Relay (1 A @ 6-27 VDC/6-240 VAC)	\$109.00
CO-01AR-D	AC (100-120 VAC)		\$109.00

Standard PLC Unit Features:

- Eight discrete input points
- Six discrete output points
- Two RS-232 communications ports
- One RS-485 communications port
- Calendar / clock
- Battery backup (Battery, p/n D2-BAT-1, sold separately)



Analog PLC

CLICK Analog PLC Units				
Part Number	Inputs (4 points)	Outputs (4 points)	Analog Inputs, Outputs	Price
CO-02DD1-D	DC (24 VDC, sink/source)	DC (0.1 A, 5-24 VDC, Sink)	2 channels in / 2 channels out; voltage (0-5 VDC) and current (4-20 mA) selectable, 12-bit resolution for both inputs and outputs	\$129.00
CO-02DD2-D		DC (0.1 A, 24 VDC, Source)		\$129.00
CO-02DR-D		Relay (1 A @ 6-27 VDC/6-240 VAC)		\$139.00

Analog PLC Unit Features:

- Four discrete input points and four discrete output points
- Two analog input points and two analog output points (not isolated)
- Two RS-232 communications ports
- One RS-485 communications port
- Calendar / clock
- Battery backup (Battery, p/n D2-BAT-1, sold separately)

CLICK PLC Overview

PLC Units (continued)

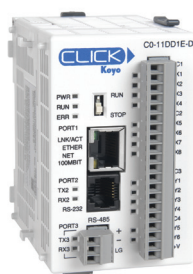


Ethernet Basic PLC

CLICK Ethernet Basic PLC Units			
Part Number	Inputs (8 points)	Outputs (6 points)	Price
CO-10DD1E-D	DC (24 VDC, sink/source)	DC (0.1 A, 5-27 VDC, Sink)	\$129.00
CO-10DD2E-D		DC (0.1 A, 24 VDC, Source)	\$129.00
CO-10DRE-D		Relay (1A @ 6-27 VDC/6-240 VAC)	\$129.00
CO-10ARE-D	AC (100-120 VAC)		\$139.00

Ethernet Basic PLC Unit Features:

- Eight discrete input points
- Six discrete output points
- One Ethernet communications port
- One RS-232 communications port
- Calendar / clock
- Battery backup (Battery, p/n D2-BAT-1, sold separately)



Ethernet Standard PLC

CLICK Ethernet Standard PLC Units			
Part Number	Inputs (8 points)	Outputs (6 points)	Price
CO-11DD1E-D	DC (24 VDC, sink/source)	DC (0.1 A, 5-27 VDC, Sink)	\$149.00
CO-11DD2E-D		DC (0.1 A, 24 VDC, Source)	\$149.00
CO-11DRE-D		Relay (1 A @ 6-27 VDC/6-240 VAC)	\$159.00
CO-11ARE-D	AC (100-120 VAC)		\$159.00

Ethernet Standard PLC Unit Features:

- Eight discrete input points
- Six discrete output points
- One Ethernet communications port
- One RS-232 communications port
- One RS-485 communications port
- Calendar / clock
- Battery backup (Battery, p/n D2-BAT-1, sold separately)

CLICK PLC Overview

Power Supplies

Two power supplies are offered.



CO-00AC



CO-01AC

DC-DC Converter

This DC-to-DC converter can be used to power the CLICK PLC from 12 VDC input power.



PSP24-DC12-1

CLICK Power Supplies			
Part Number	Input Voltage	Output Current	Price
CO-00AC	85-264 VAC	0.5A @ 24 VDC	\$29.00
CO-01AC	85-264 VAC	1.3A @ 24 VDC	\$39.00

12 VDC-to-24 VDC Converter			
Part Number	Input Voltage	Output Current	Price
PSP24-DC12-1	9.5-18 VDC	1.0A @ 24 VDC	\$78.00

Discrete Input Modules

There are six discrete input modules available.



CO-08ND3



CO-08ND3-1



CO-16ND3



CO-08NE3



CO-16NE3



CO-08NA

CLICK Discrete Input Modules		
Part Number	Inputs	Price
CO-08ND3	DC (8 pts, 12-27 VDC)	\$33.00
CO-08ND3-1	DC (8 pts, 3.3-5 VDC)	\$33.00
CO-16ND3	DC (16 pts, 24 VDC)	\$45.00
CO-08NE3	AC/DC (8 pts, 24 VAC/VDC)	\$35.00
CO-16NE3	AC/DC (16 pts, 24 VAC/VDC)	\$49.00
CO-08NA	AC (8 pts, 100-120 VAC)	\$40.00

Discrete Output Modules

There are seven discrete output modules available.



CO-08TD1



CO-08TD2



CO-16TD1



CO-16TD2



CO-08TA



CO-04TRS



CO-08TR

CLICK Discrete Output Modules		
Part Number	Outputs	Price
CO-08TD1	DC (8 pts, 0.3 A @ 3.3-27 VDC, Sink)	\$35.00
CO-08TD2	DC (8 pts, 0.3 A @ 12-24 VDC, Source)	\$35.00
CO-16TD1	DC (16 pts, 0.1 A @ 5-27 VDC, Sink)	\$45.00
CO-16TD2	DC (16 pts, 0.1 A @ 12-24 VDC, Source)	\$45.00
CO-08TA	AC (8 pts, 0.3A @ 17-240 VAC)	\$50.00
CO-04TRS*	Relay (4 pts, 7A @ 6-27 VDC/6-240 VAC)	\$44.00
CO-08TR	Relay (8 pts, 1A @ 6-27 VDC/6-240 VAC)	\$40.00

* To drive more than a 7A load or to use replaceable relays, consider using a CO-16TD1 output module with a ZL-RRL16-24-1 ZIPLink relay module and the correct ZIPLink cable (see Wiring System for CLICK PLCs later in this section).

CLICK PLC Overview

Discrete Combo I/O Modules

There are three discrete combo modules available.



CO-16CDD1

CO-16CDD2

CO-08CDR

Discrete Combo I/O Modules			
Part Number	Input Type	Output Type	Price
CO-16CDD1	DC (8 pts, 24 VDC)	DC (8 pts, 0.1A @ 5-27 VDC, Sink)	\$59.00
CO-16CDD2	DC (8 pts, 24 VDC)	DC (8 pts, 0.1A @ 12-24 VDC, Source)	\$59.00
CO-08CDR	DC (4 pts, 12-24 VDC)	Relay (4 pts, 1A @ 6.25-24 VDC / 6-240 VAC)	\$49.00

Analog Input Modules

There are four analog input modules available.



CO-04AD-1

CO-04AD-2

CO-04RTD

CO-04THM

Analog Input Modules		
Part Number	Analog Input Types	Price
CO-04AD-1	4 channel, current (0-20 mA), 13 bit	\$89.00
CO-04AD-2	4 channel, voltage (0-10 V), 13 bit	\$89.00
CO-04RTD	4 channel RTD input (0.1 degree °C/°F resolution), or resistive input (0 - 3125Ω, 0.1Ω or 0.01Ω resolution)	\$149.00
CO-04THM	4 channel thermocouple input (0.1 degree °C/°F resolution), or voltage input (-156.25 mV to 1.25 V, 16 bit)	\$149.00

Analog Output Modules

There are two analog output modules available.



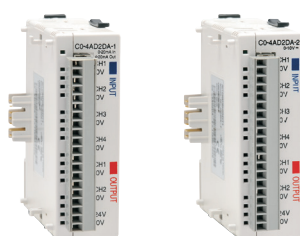
CO-04DA-1

CO-04DA-2

Analog Output Modules		
Part Number	Analog Output Types	Price
CO-04DA-1	4 channel, current sourcing (4-20 mA), 12 bit	\$119.00
CO-04DA-2	4 channel, voltage (0-10 V), 12 bit	\$119.00

Analog Combo I/O Modules

There are two analog combo modules available.



CO-4AD2DA-1

CO-4AD2DA-2

Analog Combo I/O Modules			
Part Number	Analog Input Type	Analog Output Type	Price
CO-4AD2DA-1	4 channel, current (0-20 mA), 13 bit	2 channel, current sourcing (4-20 mA), 12 bit	\$149.00
CO-4AD2DA-2	4 channel, voltage (0-10 V), 13 bit	2 channel, voltage (0-10 V), 12 bit	\$149.00

CLICK PLC Overview

What you'll need

Of course, what you'll need for your system depends on your particular application, but this overview shows you what you'll need for a simple system.

1. Select your CLICK PLC unit.



2. If you need additional I/O, select from 24 different types of I/O modules.



3. Select a 24 VDC power supply.



or



4. Download the FREE CLICK programming software.

support.automationdirect.com/products/clickplcs.html



5. Select your PC-to-PLC programming cable.

If your PC has a USB port, use cable EA-MG-PGM-CBL to connect to the CLICK PLC port. If your PC has a 9-pin serial communications port, use programming cable D2-DSCBL. If your PC has an Ethernet port, use C5E-STPYL-C3 (crossover) or C5E-STPYL-S3 (straight through) Ethernet cable.

C5E-STPYL-C3 (crossover)
C5E-STPYL-S3 (straight through)



For Ethernet PLC Unit

D2-DSCBL



(PC requires RS-232 port
to use this cable)

or

EA-MG-PGM-CBL



6. Select tools, wire, and provide power.

Screwdriver
DN-SS1



Wire Strippers
DN-WS



Hookup Wire



CLICK Programming Software

FREE Software!

CLICK programming software can be downloaded at no charge.

The CLICK programming software is designed to be a user-friendly application, and the tools, layout, and software interaction provide ease-of-use and quick learning.

The simple operation of this software allows users to quickly develop a ladder logic program. The online help file provides information that will help you get acquainted with the software quickly.

PC Requirements

CLICK PLC Windows-based programming software works with Windows® 2000 Service Pack 4, XP Home or Professional, Vista (32 bit), Windows 7 (32 bit), Windows 8 & 10 (32 bit and 64 bit for both). These are the minimum system requirements:

- Personal Computer with a 333 MHz (2000 SP4/XP), 800 MHz (Vista), 1 GHz (Windows 7, Windows 8 & 10) or higher processor (PLC clock speed recommended; Intel Pentium/Celeron family or AMD K6 Athlon/Duron family, or compatible processor recommended)
- SVGA 1024x768 pixels resolution. (1280x1024 pixels resolution recommended)
- 150MB free hard-disk space
- Memory (free RAM): 128MB (512MB recommended) for 2000 SP4/XP; 512 MB (1 GB recommended) for Vista, 1 GB (2 GB for 64 bit) for Windows 7 and Windows 8
- CD-ROM or DVD drive (only if installing software from a CD-ROM)
- 9-pin serial port or USB port for project transfer to PLC (USB port communications also requires USB-to-serial converter. Note: USB-to-serial converter does not support XP Mode of Windows 7.)

The CLICK programming software can be downloaded free at the **AutomationDirect** Web site:

support.automationdirect.com/products/clickplcs.html

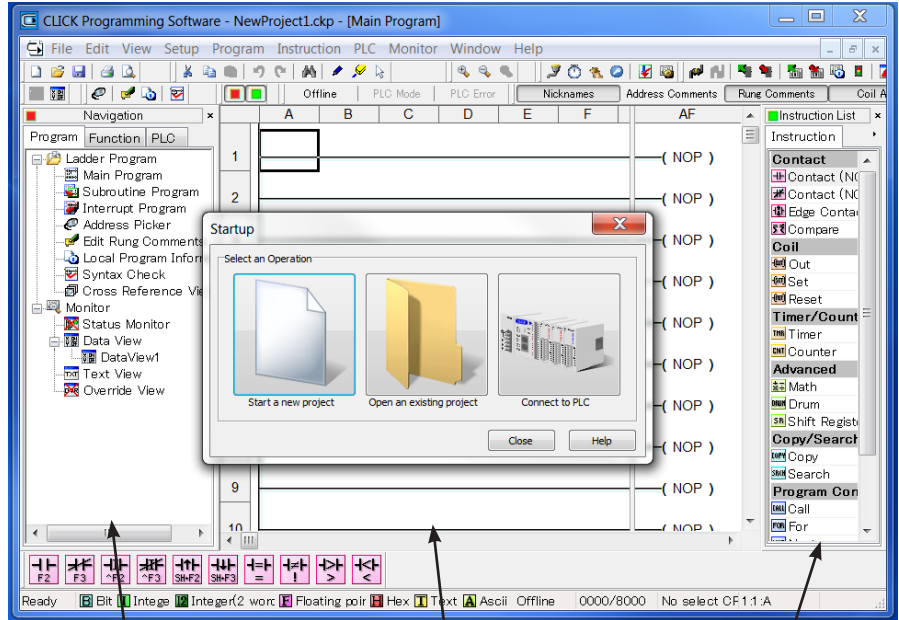
CO-PGMSW

Free Download

The programming software is also available for purchase on a CD-ROM for \$10.00

Main window

The Main Window is displayed when the program opens. It is divided into Menus, Toolbars, and Windows that work together to make project development as simple as possible.



Navigation Window

Ladder Edit Window

Instruction List Window



CLICK Programming Software

Instructions

The easy-to-use instructions are described in the CLICK programming software online help file.

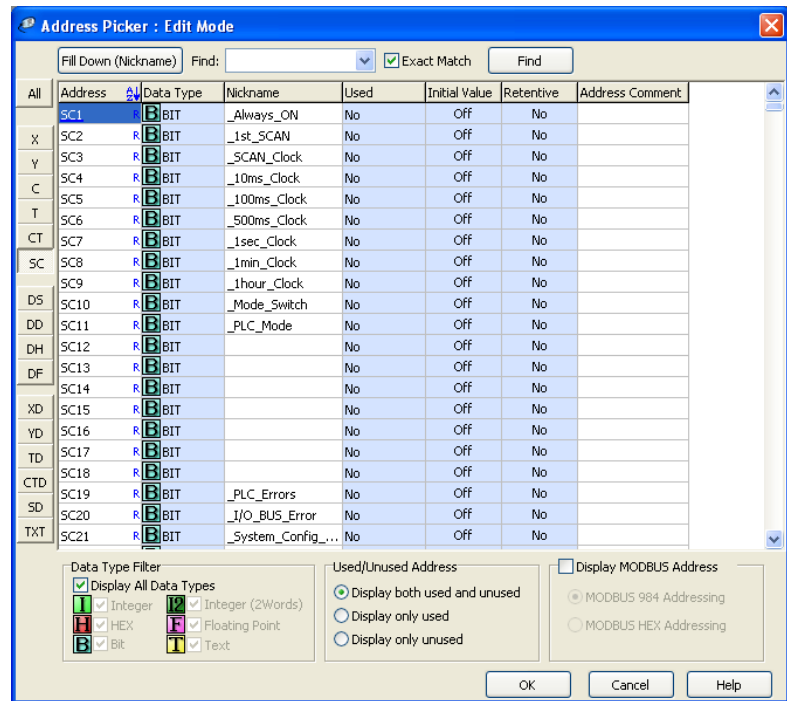
Powerful Features!

CLICK programming software has amazingly powerful features for a free software product, such as

- Address picker
- Separate subroutine programs
- Separate interrupt programs
- Color rung comment feature
- Project loader
- Documentation is stored within the PLC Memory

Address Picker

The Address Picker is a powerful multi-function memory table which can be used to assign nicknames, create address comments, and establish initial values for specific memory locations. It can assign specific memory locations to be retentive during power outages. The Address Picker also has powerful tools for sorting the memory table and making it easier to use.

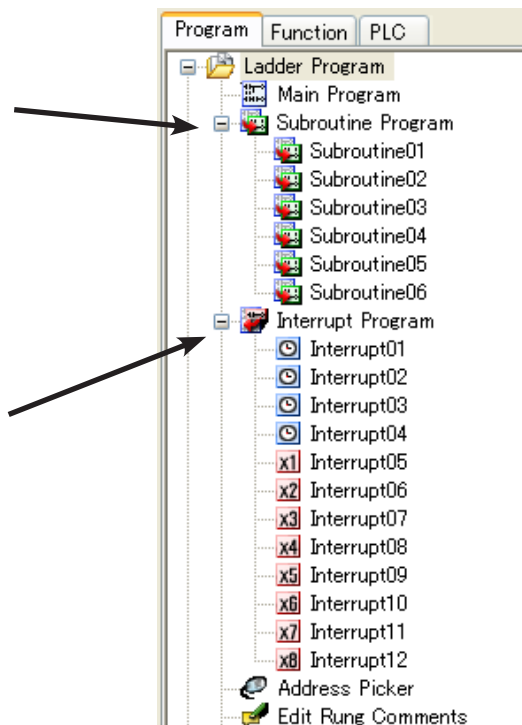


Subroutine Programs

Subroutine programs can be created and named to isolate a body of program code that is run selectively. You can run up to 986 subroutine programs.

Interrupt Programs

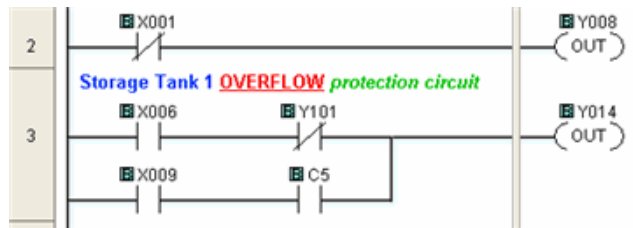
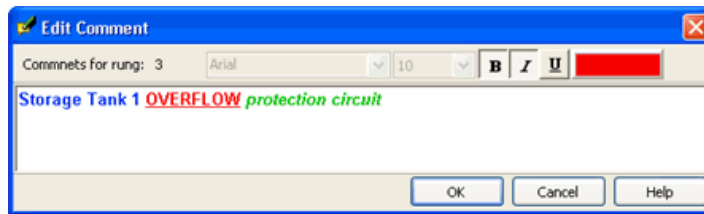
Interrupt programs are created and named. The Basic and Standard PLC Units (with or without Ethernet) support up to 12 interrupt programs. The Analog PLC Units support up to 8 interrupt programs.



CLICK Programming Software

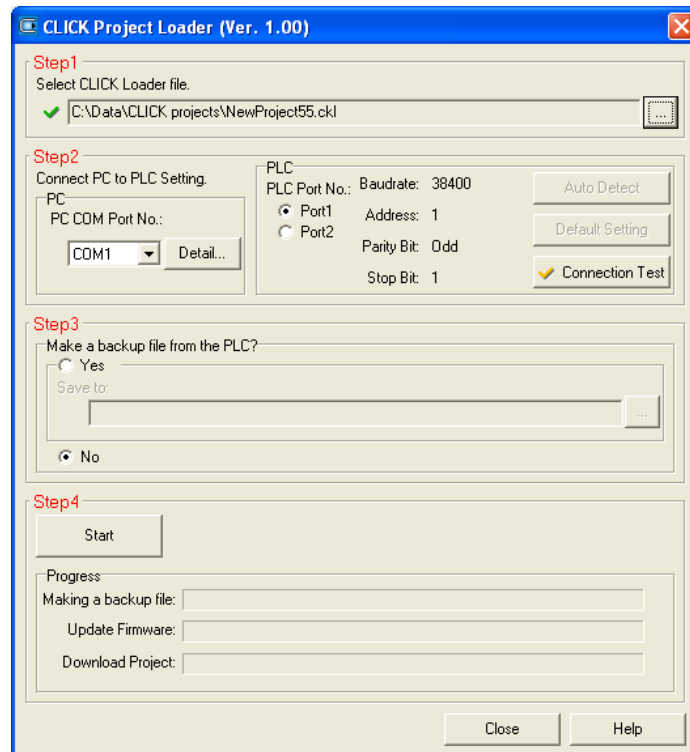
Color Rung Comment

Easily create and edit rung comments with colors and three text styles. Comments are stored in the PLC memory for future reference.



Project Loader

The CLICK programming software can export the CLICK project in an encrypted format. The exported file can be sent to the end user. Then the end user can download the file into the CLICK PLC with the tool called Project Loader.



NOTE: Project Loader is a separate program from the CLICK programming software, but it is installed on the PC when the CLICK programming software is installed.

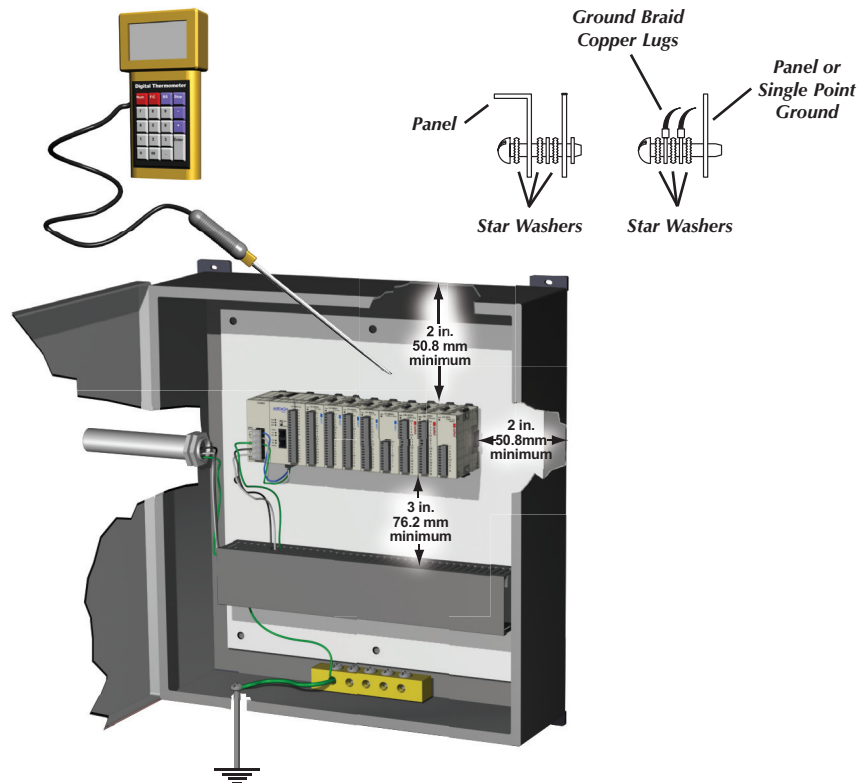
Product Dimensions and Installation

It is important to understand the installation requirements for your CLICK system. Your knowledge of these requirements will help ensure that your system operates within its environmental and electrical limits.

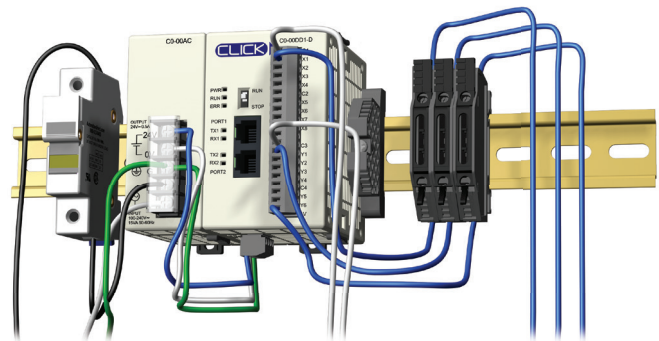
Plan for Safety

This catalog should never be used as a replacement for the user manual.

You can purchase, download free, or view online the user manuals for these products. Manual CO-USER-M is the user manual for the CLICK PLC. The user manual contains important safety information that must be followed. The system installation should comply with all appropriate electrical codes and standards.

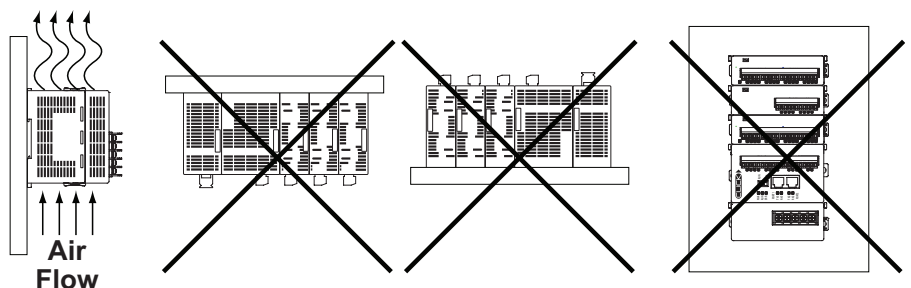


NOTE: THERE IS A MINIMUM CLEARANCE REQUIREMENT OF 2 INCHES (51 MM) BETWEEN THE **CLICK PLC** AND THE PANEL DOOR OR ANY DEVICES MOUNTED IN THE PANEL DOOR. THE SAME CLEARANCE IS REQUIRED BETWEEN THE **PLC** AND ANY SIDE OF THE ENCLOSURE. A MINIMUM CLEARANCE OF 3 INCHES (76 MM) IS REQUIRED BETWEEN THE **PLC** AND A WIREWAY OR ANY HEAT PRODUCING DEVICE.



Mounting Orientation

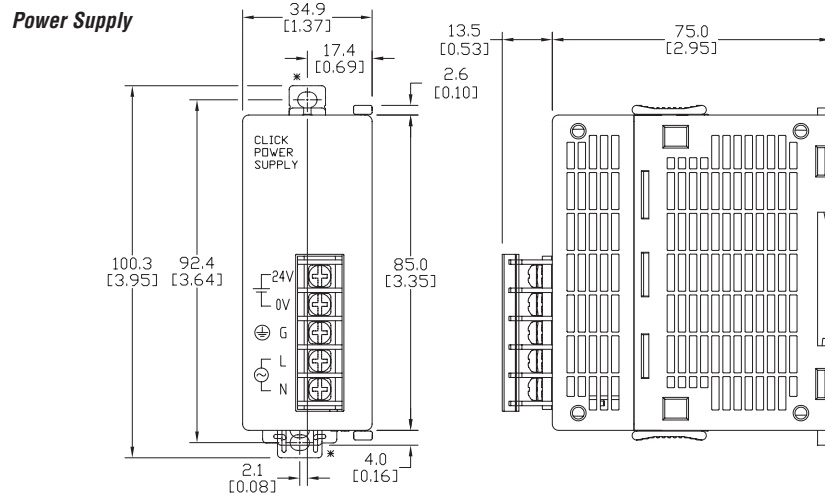
CLICK PLCs must be mounted properly to ensure ample airflow for cooling purposes. It is important to follow the unit orientation requirements and to verify that the PLC's dimensions are compatible with your application. Notice particularly the grounding requirements and the recommended cabinet clearances.



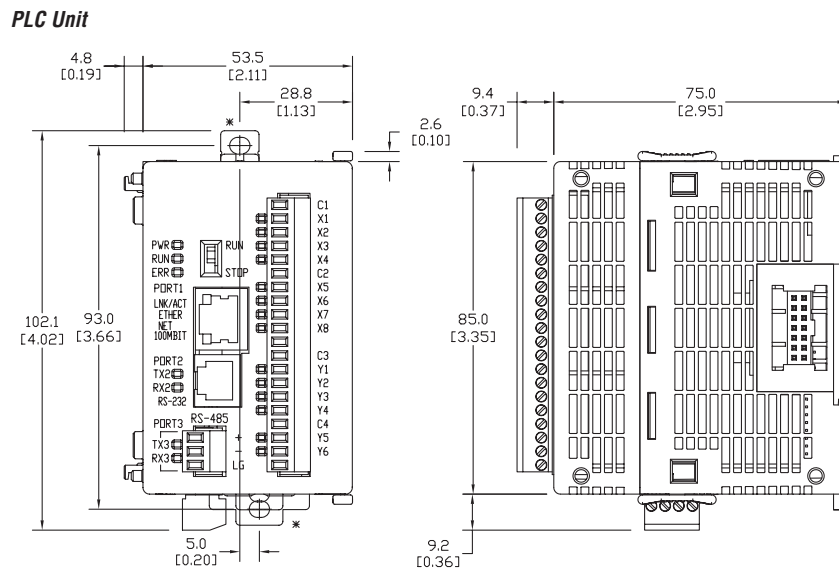
CLICK PLCs Book 1 (14.3)
eCL-25

Product Dimensions and Installation

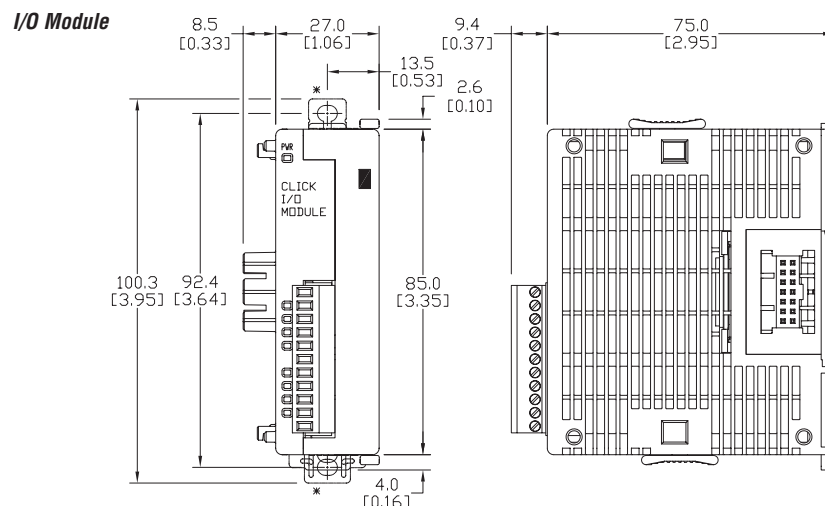
Unit Dimensions mm [inches]



*Use size M4 screws for tab mounting.



*Use size M4 screws for tab mounting.



*Use size M4 screws for tab mounting.

Networking the CLICK PLC

Built-in Communications Ports

Basic, Standard and Analog PLCs have two built-in RS-232 communications ports. Standard and Analog PLCs also have one built-in RS-485 communications port. One RS-232 port supports the Modbus RTU protocol only and can be used as the programming port. The other ports support either Modbus RTU or ASCII protocol. Both RS-232 ports supply 5V DC, so you can connect a monochrome C-more Micro HMI panel without an additional power supply.

LED Status Indicators

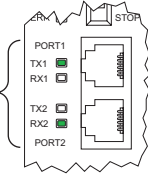
There are LED indicators located to the left of each communications port to indicate when the port is transmitting or receiving.

Basic PLCs

Port 1 & 2 LED Status Indicators

TX1 and TX2 (Green)	
On	The Comm Port is sending data.
Off	The Comm Port is not sending data.

RX1 and RX2 (Green)	
On	The Comm Port is receiving data.
Off	The Comm Port is not receiving data.

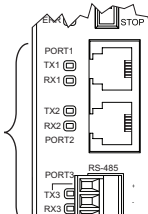


Standard and Analog PLCs

Port 1, 2, & 3 LED Status Indicators

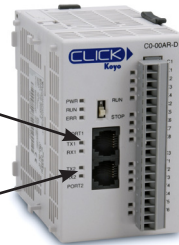
TX1, TX2 and TX3 (Green)	
On	The Comm Port is sending data.
Off	The Comm Port is not sending data.

RX1, RX2 and RX3 (Green)	
On	The Comm Port is receiving data.
Off	The Comm Port is not receiving data.



Com Port 1

Com Port 2

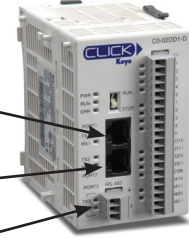


Basic PLC

Com Port 1

Com Port 2

Com Port 3



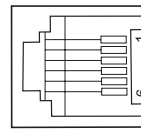
Standard and Analog PLCs

Com Port 1 Specifications

Use: Programming Port / Serial Communications (Slave only)	
Physical: 6 pin, RJ12, RS-232	
Communication speed (baud): 38400 (fixed)	
Parity: Odd	
Station Address: 1	
Data length: 8 bits	
Stop bit: 1	
Protocol: Modbus RTU (slave only)	

Port 1

6 pin RJ12 Phone Type Jack



Port 1 Pin Descriptions

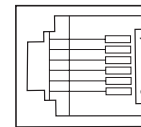
Pin	Signal	Description
1	0V	Power (-) connection (GND)
2	5V	Power (+) connection
3	RXD	Receive data (RS-232)
4	TXD	Transmit data (RS-232)
5	NC	No connection
6	0V	Power (-) connection (GND)

Com Port 2 Specifications

Com Port 2 Specifications	Default
Use: Serial Communications	-
Physical: 6 pin, RJ12, RS-232	-
Communication speed (baud): 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	38400
Parity: odd, even, none	Odd
Station Address: 1 to 247	1
Data length: 8 bits (Modbus RTU) or 7, 8 bits (ASCII)	8 bits
Stop bit: 1, 2	1
Protocol: Modbus RTU (master/slave) or ASCII in/out	Modbus RTU

Port 2

6 pin RJ12 Phone Type Jack



Port 2 Pin Descriptions

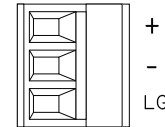
Pin	Signal	Description
1	0V	Power (-) connection (GND)
2	5V	Power (+) connection
3	RXD	Receive data (RS-232)
4	TXD	Transmit data (RS-232)
5	RTS	Request to send
6	0V	Power (-) connection (GND)

Com Port 3 Specifications

Com Port 3 Specifications	Default
Use: Serial Communications	-
Physical: 3 pin, RS-485	-
Communication speed (baud): 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	38400
Parity: odd, even, none	Odd
Station Address: 1 to 247	1
Data length: 8 bits (Modbus RTU) or 7, 8 bits (ASCII)	8 bits
Stop bit: 1, 2	1
Protocol: Modbus RTU (master/slave) or ASCII in/out	Modbus RTU

Port 3

RS-485

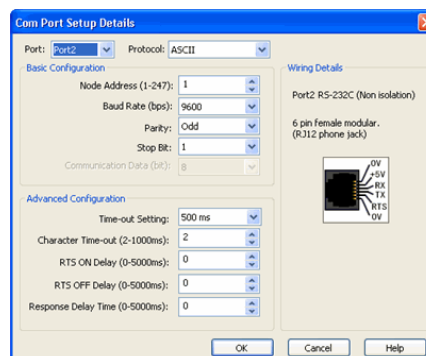


Port 3 Pin Descriptions

Pin	Signal	Description
1	+	Signal A (RS-485)
2	-	Signal B (RS-485)
3	LG	Logic Ground(0 V)

Port Setup

Use CLICK programming software to easily configure the communications ports.



Built-in Communications Ports

Ethernet Basic and Standard PLCs have one built-in Ethernet communications port and one RS-232 communications port. Ethernet Standard PLCs also have one built-in RS-485 communications port. The Ethernet port supports the Modbus TCP protocol. The RS-232 and RS-485 ports support either Modbus RTU or ASCII protocol. The RS-232 port supplies 5 VDC, so you can connect a monochrome C-more Micro HMI panel without an additional power supply.

LED Status Indicators

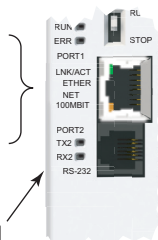
There are LED indicators located to the left of each communication port to indicate when the port is transmitting or receiving.

Ethernet Basic PLCs

Port 1 & 2 LED Status Indicators

LNK/ACT LED (Green)	
On	Connected to the network
Blink	Communicating
Off	Disconnected from the network

100MBIT LED (Orange)	
On	Communicating at 100Mbps
Off	Communicating at 10Mbps or disconnected from the network



TX2 (Green)	
On	The Comm Port is sending data.
Off	The Comm Port is not sending data.

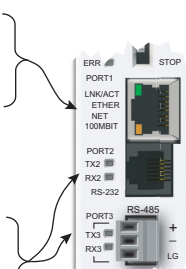
RX2 (Green)	
On	The Comm Port is receiving data.
Off	The Comm Port is not receiving data.

Ethernet Standard PLCs

Port 1, 2 & 3 LED Status Indicators

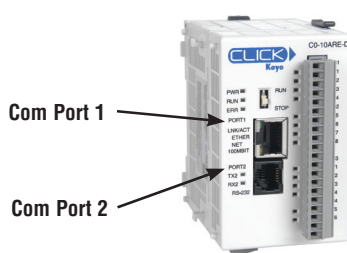
LNK/ACT LED (Green)	
On	Connected to the network
Blink	Communicating
Off	Disconnected from the network

100MBIT LED (Orange)	
On	Communicating at 100Mbps
Off	Communicating at 10Mbps or disconnected from the network

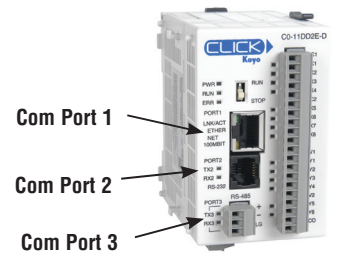


TX2 and TX3 (Green)	
On	The Comm Port is sending data.
Off	The Comm Port is not sending data.

RX2 and RX3 (Green)	
On	The Comm Port is receiving data.
Off	The Comm Port is not receiving data.



Ethernet Basic PLC



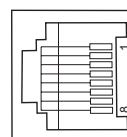
Ethernet Standard PLCs

Com Port 1 Specifications

Use: Programming and Ethernet Communication
Physical: 8 pin, RJ45, Ethernet
Communication speed (Mbps): 10/100
Protocol: Modbus TCP

Port 1

8 pin RJ45



Port 1 Pin Descriptions

1	TX+	Transmit Data (+)
2	TX-	Transmit Data (-)
3	RX+	Receive data (+)
4	NC	Not connected
5	NC	Not connected
6	RX-	Receive Data (-)
7	NC	No connection
8	NC	No connection

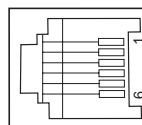
Com Port 2 Specifications

Default

Use: Serial Communication	-
Physical: 6 pin, RJ12, RS-232	-
Communication speed (baud): 2400, 4800, 9600, 19200, 38400, 57600, 115200	38400
Parity: odd, even, none	Odd
Station Address: 1 to 247	1
Data length: 8 bits (Modbus RTU) or 7, 8 bits (ASCII)	8 bits
Stop bit: 1,2	1
Protocol: Modbus RTU (master/slave) or ASCII in/out	Modbus RTU

Port 2

6 pin RJ12 Phone Type Jack



Port 2 Pin Descriptions

1	0V	Power (-) connection (GND)
2	5V	Power (+) connection
3	RXD	Receive data (RS-232)
4	TXD	Transmit data (RS-232)
5	RTS	Request to send
6	0V	Power (-) connection (GND)

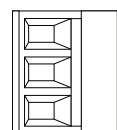
Com Port 3 Specifications

Default

Use: Serial Communication	-
Physical: 3 pin, RS-485	-
Communication speed (baud): 2400, 4800, 9600, 19200, 38400, 57600, 115200	38400
Parity: odd, even, none	Odd
Station Address: 1 to 247	1
Data length: 8 bits (Modbus RTU) or 7, 8 bits (ASCII)	8 bits
Stop bit: 1,2	1
Protocol: Modbus RTU (master/slave) or ASCII in/out	Modbus RTU

Port 3

RS-485

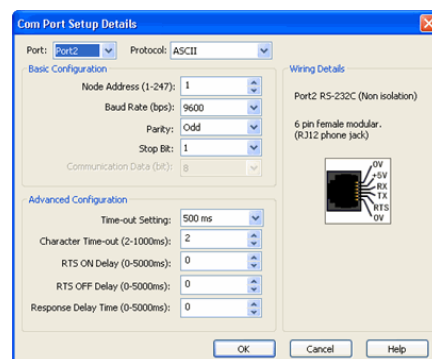


Port 3 Pin Descriptions

1	+	(plus)	Signal A (RS-485)
2	-	(minus)	Signal B (RS-485)
3	LG		Logic Ground(0 V)

Port Setup

Use CLICK programming software to easily configure the communication ports.

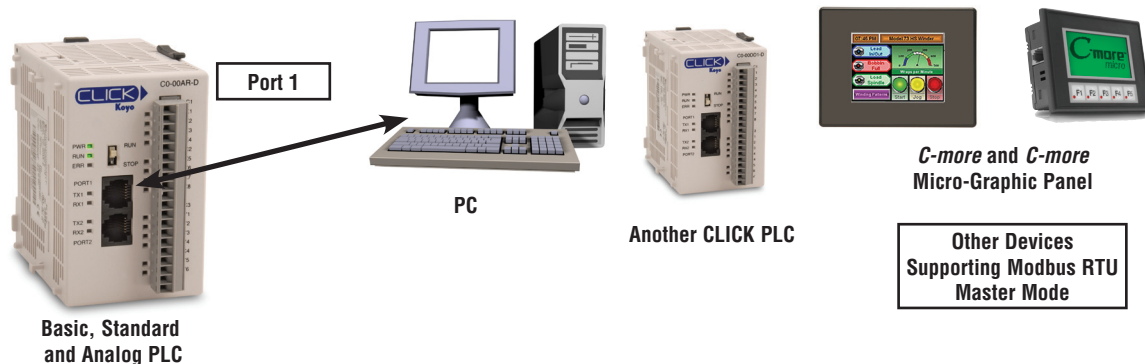


Networking the CLICK PLC

Typical Communication Applications

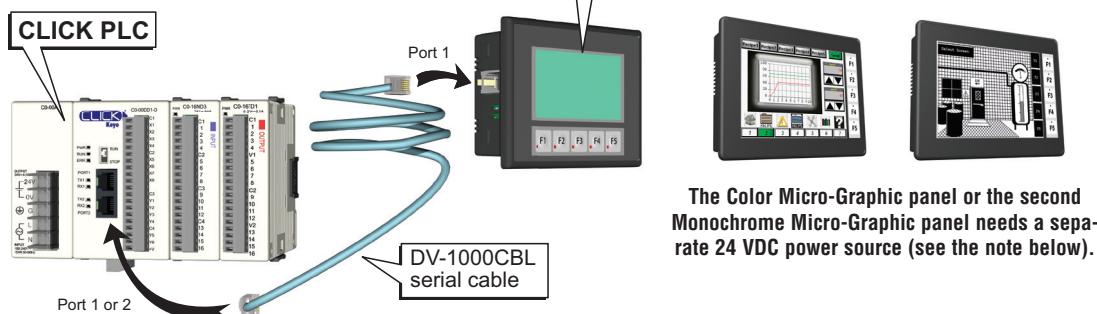
The diagrams on these three pages illustrate the typical uses for the CLICK PLC's communication ports.

Port 1 (RS-232) – Modbus RTU Slave Mode Only



C-more Micro-Graphic panels (monochrome models only) can get 5 VDC power from Com port 1 or 2.

Example



NOTE: CLICK's (RS-232) Port 1 and Port 2 can provide 5 VDC power to the panel, but not at the same time. If a C-more Micro-Graphic panel is connected to both ports, then at least one of the panels must be powered by a C-more Micro DC power adapter, EA-MG-P1 or EA-MG-SP1, or another 24 VDC power source. Color C-more Micro-Graphic panels must also be powered from a separate 24 VDC source.

Do not use the following DirectLOGIC devices with CLICK's Port 1 or 2:



WARNING: The following DirectLOGIC PLC devices cannot be used with a CLICK PLC's Port 1 or Port 2:
Handheld Programmer for DL05, DL06, DL105, DL205 & D3-350 CPUs, p/n D2-HPP
Handheld Programmer for DL405 CPUs, p/n D4-HPP-1
Timer/Counter Access for DL05, DL06, DL105, DL205, DL405 & D3-350 CPUs, p/n DV-1000



D2-HPP



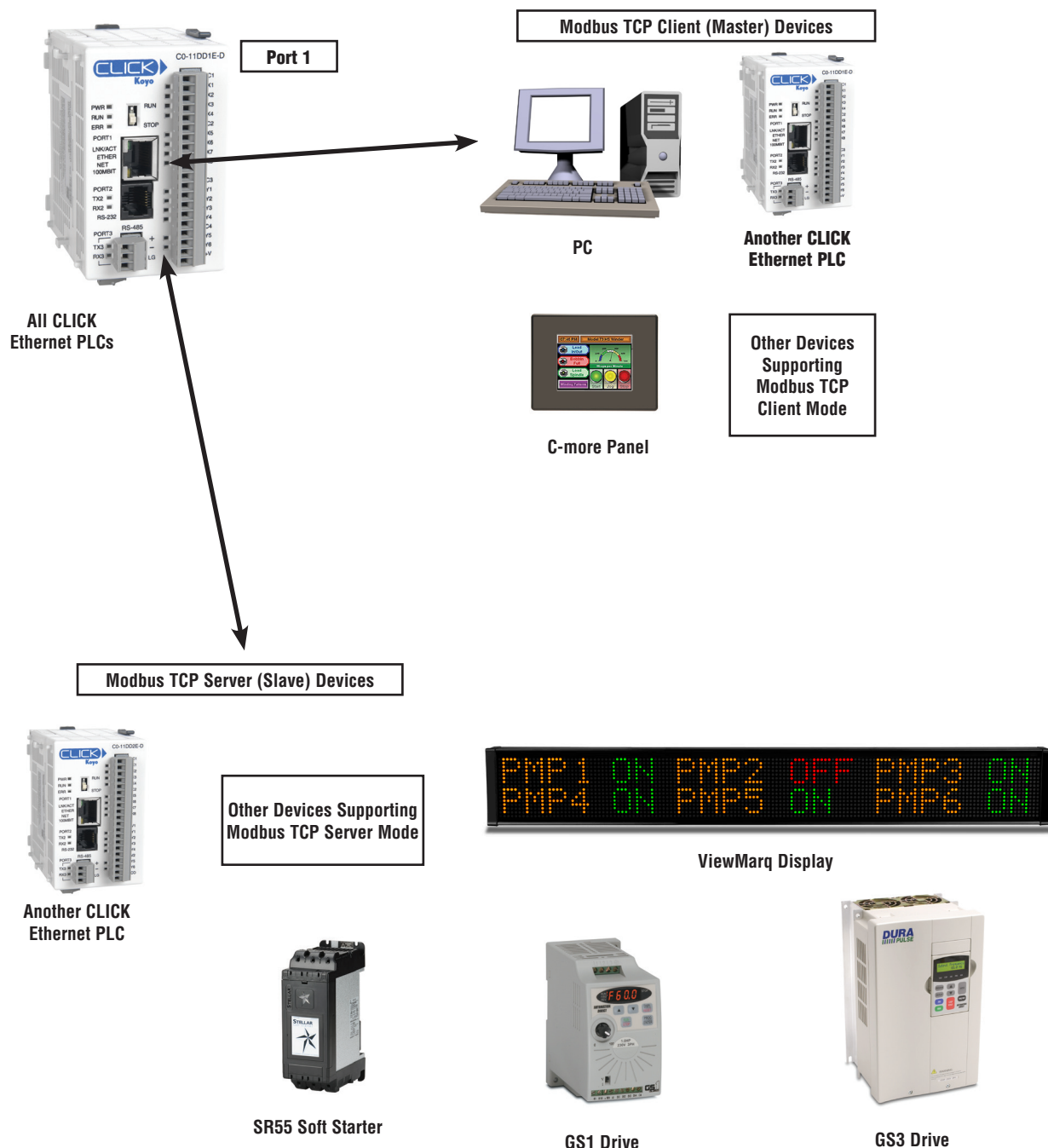
D4-HPP-1



DV-1000

Networking the CLICK PLC

Port 1 (Ethernet) – Modbus TCP



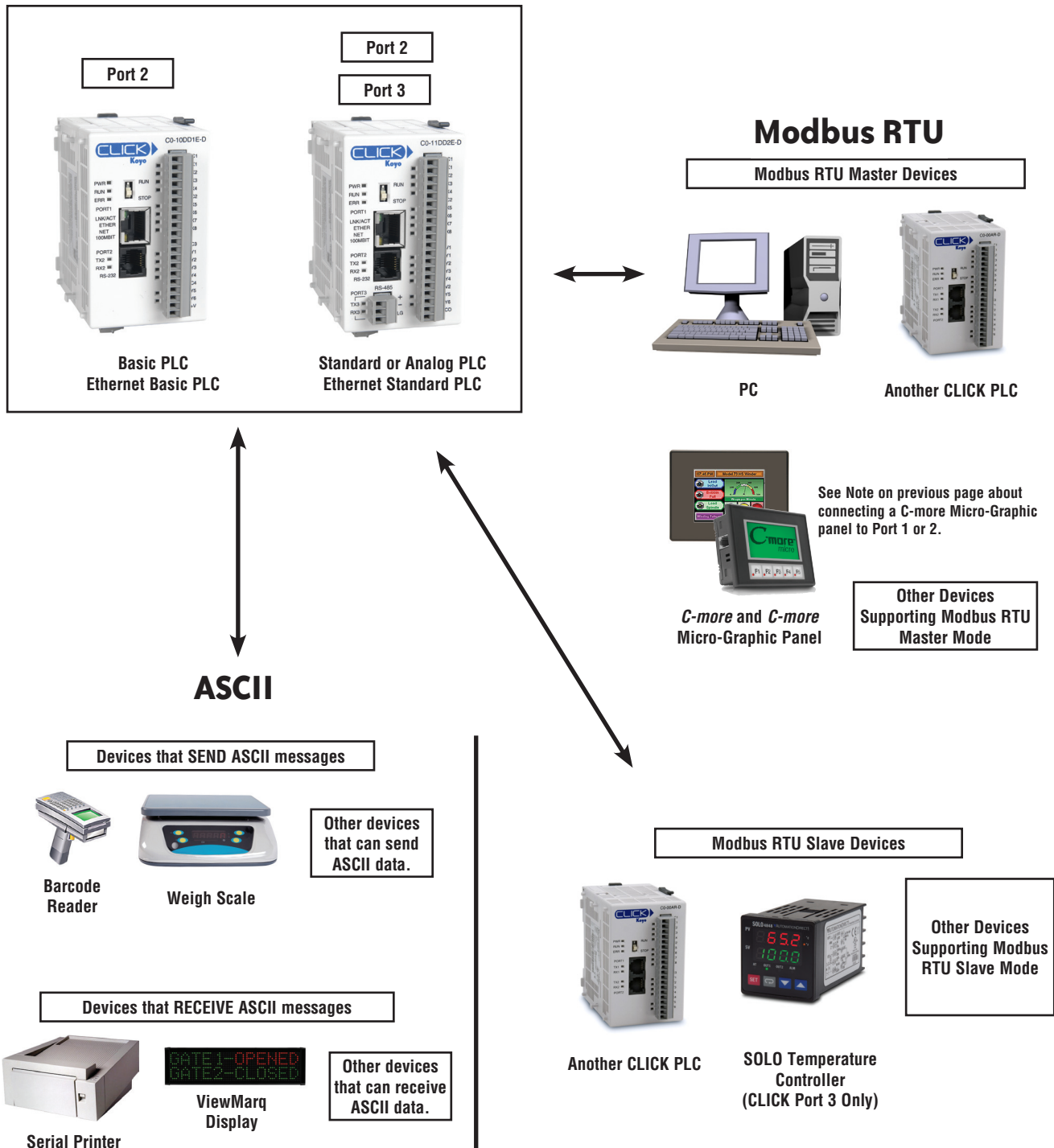
Networking the CLICK PLC

Port 2 (RS-232) – Modbus RTU or ASCII

Port 3 (RS-485; Standard, Ethernet Standard and Analog PLCs Only) – Modbus RTU or ASCII

All PLCs have RS-232 port 2, but only Standard, Analog and Ethernet Standard PLCs have RS-485 port 3.

Ports 2 and 3 allow networking to similar devices.



Power Supplies

Power Supplies

The CLICK PLC family offers two 24 VDC power supplies. They are identical except for the output current.

It is not mandatory to use one of these CLICK power supplies for the CLICK PLC system. You can use any other 24 VDC power supply that Automationdirect.com offers, including the PSP24-DC12-1 12 VDC to 24 VDC converter shown below.

CO-00AC Power Supply

Limited auxiliary AC power supply allows you to power the 24 VDC CLICK C0 series PLCs with 100-240 VAC supply power. The 0.5A DC power supply is capable of controlling the PLC plus a limited configuration based on the power budget of each I/O module. The CO-00AC is a low-cost solution for applications requiring only minimal I/O and power consumption. This power supply will not support a fully-populated CLICK PLC system with all possible I/O module combinations.

CO-01AC Power Supply

Expanded auxiliary AC power supply allows you to power the 24 VDC CLICK C0 series PLCs with 100-240 VAC supply power. The 1.3A DC power supply is capable of supporting a fully-populated CLICK PLC system with all possible I/O module combinations, with no concerns for exceeding the power budget.

PSP24-DC12-1 DC-DC Converter

With this DC-DC converter you can operate the CLICK PLC with 12 VDC input power.



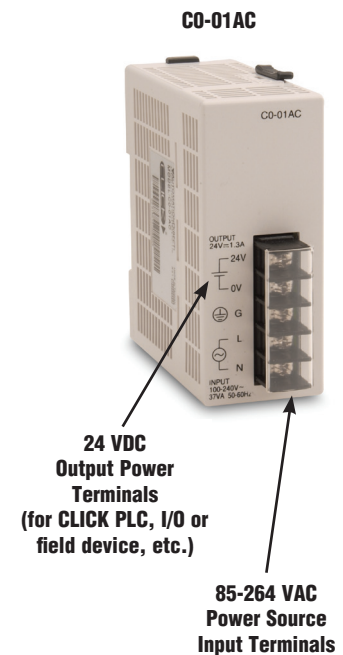
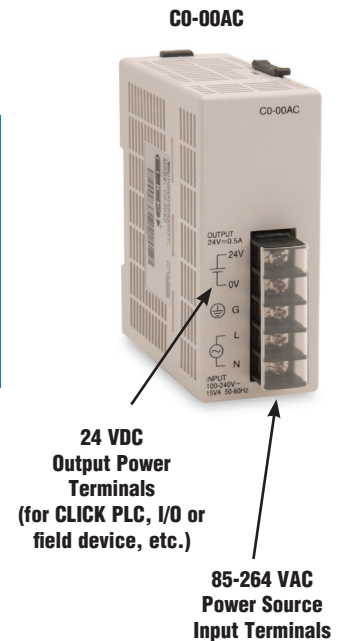
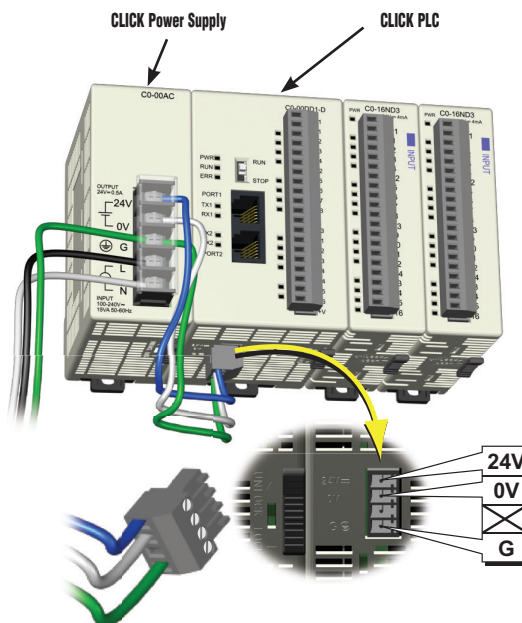
PSP24-DC12-1

CLICK 24 VDC Power Supply Ratings		
Part Number	Output Current	Price
CO-00AC	0.5 A	\$29.00
CO-01AC	1.3 A	\$39.00

CO-00AC Power Supply Specifications	
Input Voltage Range	85-264 VAC
Input Frequency	47-63 Hz
Input Current (typical)	0.3 A @ 100 VAC, 0.2 A @ 200 VAC
Inrush Current	30 A
Output Voltage Range	23-25 VDC
Output Current	0.5 A
Over Current Protection	@ 0.65 A (automatic recovery)
Weight	5.3 oz (150g)

CO-01AC Power Supply Specifications	
Input Voltage Range	85-264 VAC
Input Frequency	47-63 Hz
Input Current (typical)	0.9 A @ 100 VAC, 0.6 A @ 200 VAC
Inrush Current	30 A
Output Voltage Range	23-25 VDC
Output Current	1.3 A
Over Current Protection	@ 1.6 A (automatic recovery)
Weight	6.0 oz (170g)

PSP24-DC12-1 DC-DC Converter Specifications	
Input Voltage Range	9.5-18 VDC
Input Power (no load)	1.0 W max.
Startup Voltage	8.4 VDC
Undervoltage Shutdown	7.6 VDC
Output Voltage Range	24-28 VDC (adjustable)
Output Current	1.0 A
Short Circuit Protection	Current limited at 110% typical
Weight	7.5 oz (213g)



24 VDC power is supplied to the PLC unit through wiring connected from the power supply output to the 4-pin 24 VDC input connector located on the bottom of the PLC unit.

Power Budgeting

Power Budgeting

There are two areas to be considered when determining the power required to operate a CLICK PLC system. The first area is the power required by the CLICK PLC, along with the internal logic side power that the CPU provides to its own I/O and any connected I/O modules that are powered through the PLC expansion port; plus any device, such as a C-more Micro-Graphic panel, that is powered through one of the communications ports.

The second area is the power required by all externally connected I/O devices. This should be viewed as the field side power required. The field side power is dependent on the voltage used for a particular input or output device as it relates to the wired I/O point, and the calculated load rating of the connected device.

It is strongly recommended that the power source for the logic side be separate from the power source for the field side to help eliminate possible electrical noise.

Power budgeting requires the calculation of the total current the 24 VDC power source needs to provide to CLICK's logic side, and also a separate calculation of the total current required for all devices operating from the field side of the PLC system.

Refer to the Power Budgeting example shown on the following page. The table shows required current for a CLICK PLC, two I/O modules, and a C-more Micro. Use the total amperage values to select the properly sized power supply.



CLICK 24 VDC Power Supply
CO-00AC or CO-01AC



Other 24 VDC Power Supply
Example: PSP24-60S

PLC Current Consumption (mA)		
Part Number	Power Budget 24 VDC (logic side)	External 24 VDC (field side)
Basic PLC Units		
CO-00DD1-D	120	60
CO-00DD2-D	120	0
CO-00DR-D		
CO-00AR-D		
Standard PLC Units		
CO-01DD1-D	140	60
CO-01DD2-D	140	0
CO-01DR-D		
CO-01AR-D		
Analog PLC Units		
CO-02DD1-D	140	60
CO-02DD2-D	140	0
CO-02DR-D		
Ethernet Basic PLC Units		
CO-10DD1E-D	120	60
CO-10DD2E-D	120	0
CO-10DRE-D		
CO-10ARE-D		
Ethernet Standard PLC Units		
CO-11DD1E-D	140	60
CO-11DD2E-D	140	0
CO-11DRE-D		
CO-11ARE-D		

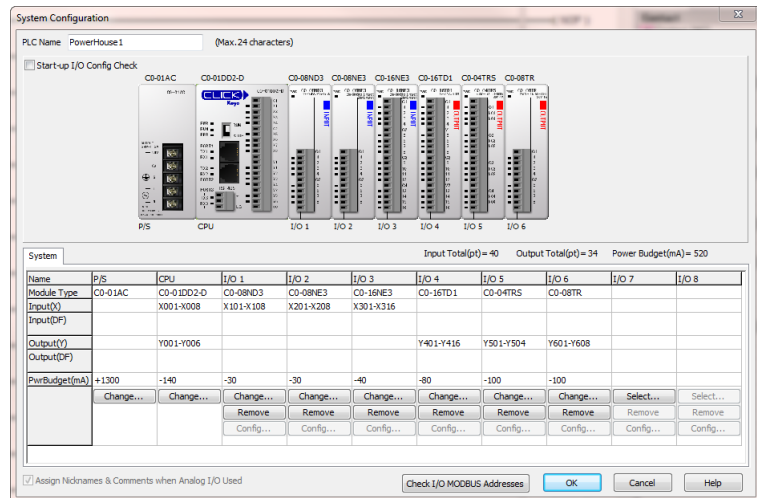
I/O Module Current Consumption (mA)		
Part Number	Power Budget 24 VDC (logic side)	External 24 VDC (field side)
Discrete Input Modules		
CO-08ND3	30	0
CO-08ND3-1	30	0
CO-16ND3	40	0
CO-08NE3	30	0
CO-16NE3	40	0
CO-08NA	30	0
Discrete Output Modules		
CO-08TD1	50	15
CO-08TD2	50	0
CO-16TD1	80	100
CO-16TD2	80	0
CO-08TA	80	0
CO-04TRS	100	0
CO-08TR	100	0

I/O Module Current Consumption (continued) (mA)		
Part Number	Power Budget 24 VDC (logic side)	External 24 VDC (field side)
Discrete Combo I/O Modules		
CO-16CDD1	80	50
CO-16CDD2	80	0
CO-08CDR	80	0
Analog Input Modules		
CO-04AD-1	20	65
CO-04AD-2	23	65
CO-04RTD	25	0
CO-04THM	25	0
Analog Output Modules		
CO-04DA-1	20	145
CO-04DA-2	20	85
Analog Combo I/O Modules		
CO-4AD2DA-1	25	75
CO-4AD2DA-2	20	65
C-more Micro-Graphic Panel		
Monochrome only	90	0

Power Budgeting

Power Budgeting Using the CLICK Programming Software

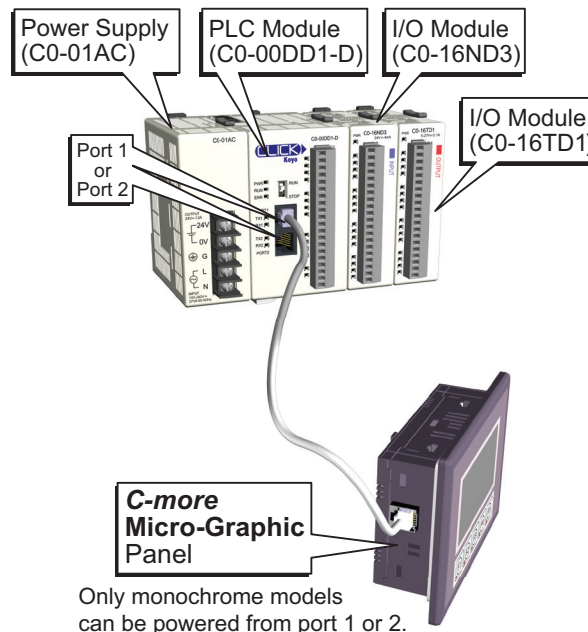
The CLICK Programming software can also be used for power budgeting. Based on the amperage rating of the power supply selected in the first column, your power budget is calculated by subtracting each consecutive module's power consumption from the total available power budget. If you exceed the maximum allowable power consumption the power budget row is highlighted in red.



Power Budgeting Example

Current Consumption (mA) Example		
Part Number	Power Budget 24 VDC (logic side)	External 24 VDC (field side)
C0-00DD1-D	120	60
C0-16ND3	40	0
C0-16TD1	80	100
C-more Micro	90	0
Total:	330	160*

* Add in calculated load of connected I/O devices.



Choosing a PLC Unit

Five types of CLICK PLC units are available:

- Basic PLCs with discrete-only inputs and outputs.
- Standard PLCs with discrete-only inputs and outputs, plus an extra communications port and battery backup.
- Analog PLCs with both discrete and analog inputs and outputs, plus an extra communications port and battery backup.
- Ethernet Basic PLCs with discrete-only inputs and outputs.
- Ethernet Standard PLCs with discrete-only inputs and outputs, plus an extra communications port and battery backup.

All CLICK PLC units offer the same performance, use the same instruction set, and support all optional I/O modules.

Basic and Standard PLC Units

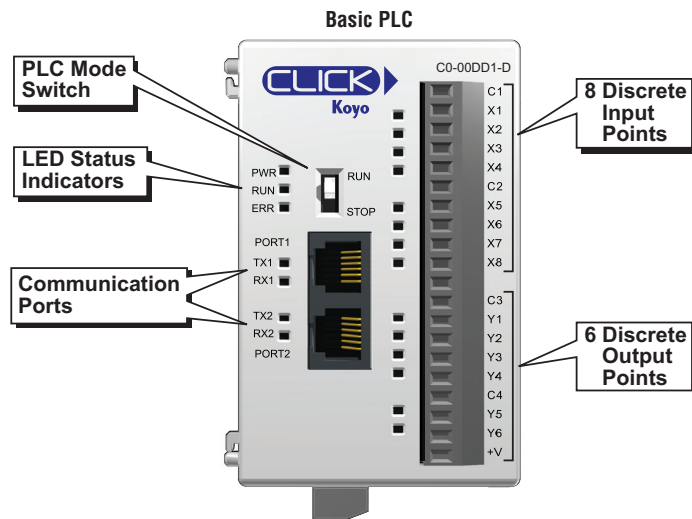
The Basic and Standard CLICK PLC units are available with different combinations of built-in I/O types (i.e. DC input/DC output, DC input/relay output, and AC input/relay output). With the 14 built-in I/O points (8 inputs/6 outputs), the PLC can be used as a ready-to-go PLC control system without any additional I/O modules. The PLC unit only requires a 24 VDC power supply.

Each PLC I/O can be easily expanded in the future with optional I/O modules as the need arises.

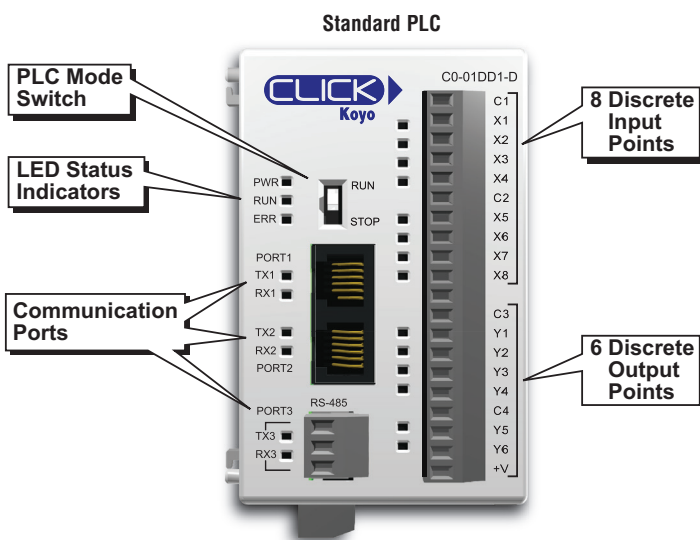
The tables on the right list the part numbers and the various I/O type combinations.

Standard PLC Units

Standard PLC modules also have an RS-485 port for Modbus and ASCII communications, and the battery backup feature which will retain the data in SRAM for 5 years (battery sold separately; part no. D2-BAT-1).



Basic PLCs			
Part Number	Discrete Input Type	Discrete Output Type	External Power
CO-00DD1-D	8 DC (sink/source)	6 DC (sink)	24V DC (required for all PLCs)
CO-00DD2-D		6 DC (source)	
CO-00DR-D		6 Relay	
CO-00AR-D	8 AC		



Standard PLCs			
Part Number	Discrete Input Type	Discrete Output Type	External Power
CO-01DD1-D	8 DC (sink/source)	6 DC (sink)	24V DC (required for all PLCs)
CO-01DD2-D		6 DC (source)	
CO-01DR-D		6 Relay	
CO-01AR-D	8 AC		

Choosing a PLC Unit

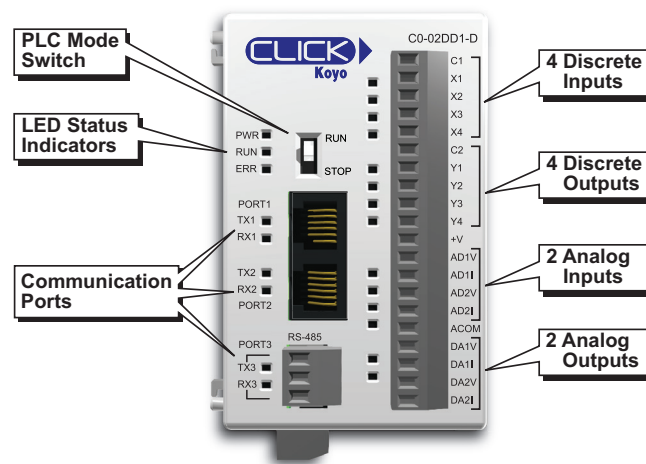
Analog PLC Units

The Analog CLICK PLC units are available with different combinations of DC in, DC sinking, sourcing or relay out, and analog in and out.

They also have an RS-485 port for Modbus and ASCII communications, and the battery backup feature which will retain the data in SRAM for 5 years (battery sold separately; part no. D2-BAT-1).

The table lists the part numbers showing the various I/O type combinations.

Analog PLC



Ethernet Basic and Standard PLC Units

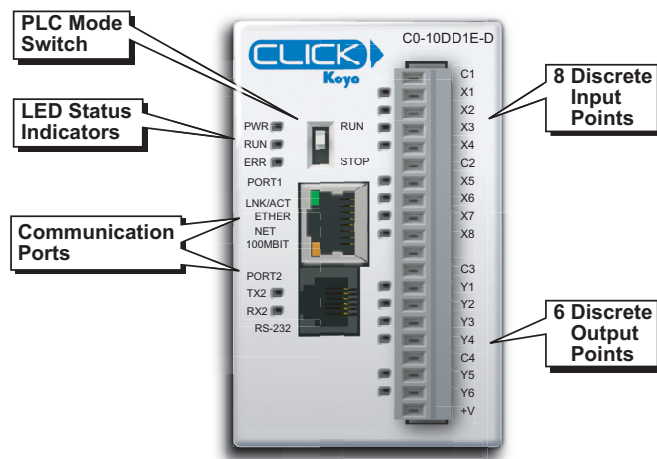
CLICK Ethernet Basic and Standard PLC units have one built-in Ethernet communications port and one standard RS-232 serial communications port. Additionally, Ethernet Standard PLC Units have an RS-485 port for Modbus and ASCII communication.

The Ethernet Basic and Standard CLICK PLC units are available with different combinations of built-in I/O types (i.e. DC input/DC output, DC input/relay output, and AC input/relay output). With the 14 built-in I/O points (8 inputs/6 outputs), the PLC Units can be used as a ready-to-go PLC control system without any additional I/O modules. The PLC Unit only requires a 24 VDC power supply.

The table on the right lists the PLC Unit part numbers and the various I/O type combinations.

All Ethernet PLC Units have a battery backup feature which will retain the data in SRAM for 5 years (battery sold separately; part no. D2-BAT-1).

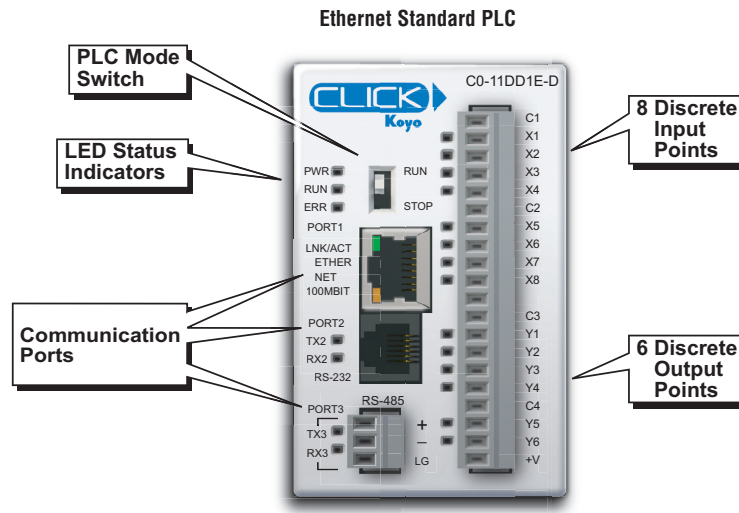
Ethernet Basic PLC



Analog PLCs					
Part Number	Discrete Input Types	Discrete Output Types	Analog Input Types	Analog Output Types	External Power
C0-02DD1-D	4 DC (sink/source)	4 DC (sink)	2 channel; voltage (0-5 VDC) / current (4-20 mA); selectable separately per channel; 12 bit	2 channel; voltage (0-5 VDC) / current (4-20 mA); selectable separately per channel; 12 bit	24 VDC (required for all PLCs)
C0-02DD2-D		4 DC (source)			
C0-02DR-D		4 relay			

Ethernet Basic PLCs			
Part Number	Discrete Input Type	Discrete Output Type	External Power
C0-10DD1E-D	8 DC (sink/source)	6 DC (sink)	24VDC (required for all PLCs)
C0-10DD2E-D		6 DC (source)	
C0-10DR-D		6 Relay	
C0-10ARE-D	8 AC		

Choosing a PLC Unit



Ethernet Standard PLCs			
Part Number	Discrete Input Type	Discrete Output Type	External Power
CO-11DD1E-D	8 DC (sink/source)	6 DC (sink)	24V DC (required for all PLCs)
CO-11DD2E-D		6 DC (source)	
CO-11DRE-D		6 Relay	
CO-11ARE-D	8 AC		

Choosing Expansion I/O Modules

I/O Modules

A variety of discrete, combo, and analog I/O modules are available for the CLICK PLC system. Up to eight I/O modules can be connected to a CLICK PLC unit to expand the system I/O count and meet the needs of a specific application. Complete I/O module specifications and wiring diagrams can be found later in this section.

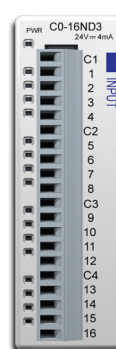
Discrete Input Modules



CO-08ND3



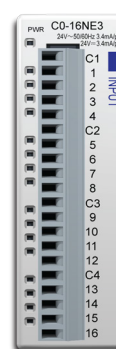
CO-08ND3-1



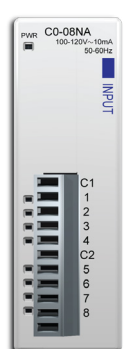
CO-16ND3



CO-08NE3



CO-16NE3



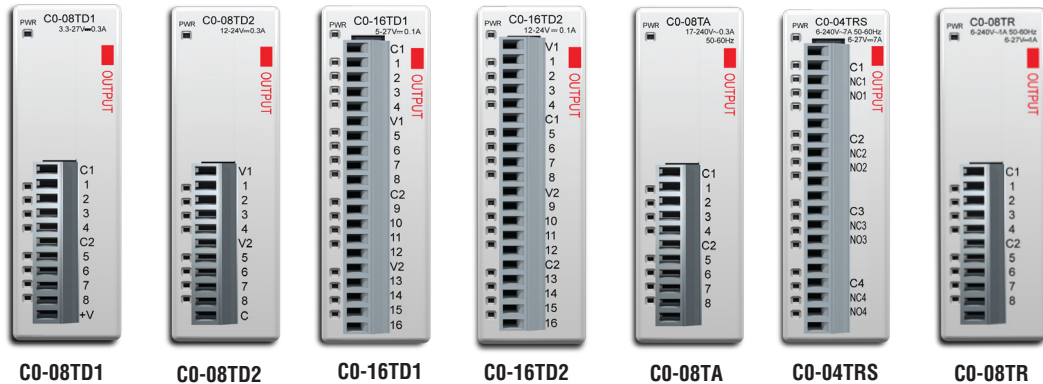
CO-08NA

Discrete Input Modules			
Part Number	I/O Type/ Number/Commons	Sink or Source	Voltage Ratings
CO-08ND3	DC/8/2	Sink or Source	12-24 VDC
CO-08ND3-1	DC/8/2	Sink or Source	3.3-5 VDC
CO-16ND3	DC/16/4	Sink or Source	24 VDC
CO-08NE3	AC/DC / 8/2	Sink or Source	24 VAC/VDC
CO-16NE3	AC/DC / 16/4	Sink or Source	24 VAC/VDC
CO-08NA	AC/8/2	N/A	100-120 VAC

Choosing Expansion I/O Modules

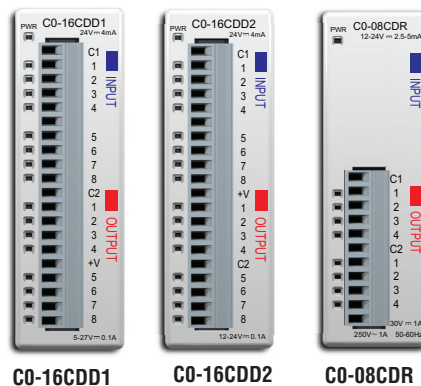
Discrete I/O Modules (continued)

Discrete Output Modules



Discrete Output Modules			
Part Number	I/O Type/ Number/ Commons	Sink or Source	Voltage/Current Ratings
CO-08TD1	DC/8/2	Sink	3.3-27 VDC, 0.3 A
CO-08TD2	DC/8/1	Source	12-24 VDC, 0.3 A
CO-16TD1	DC/16/2	Sink	5-27 VDC, 0.1 A
CO-16TD2	DC/16/2	Source	12-24 VDC, 0.1 A
CO-08TA	AC/8/2	N/A	17-240 VAC, 0.3 A
CO-04TRS	Relay/4/4	N/A	6-27 VDC, 7 A 6-240 VAC, 7 A
CO-08TR	Relay/8/2	N/A	6-27 VDC, 1 A 6-240 VAC, 1 A

Discrete Combo I/O Modules

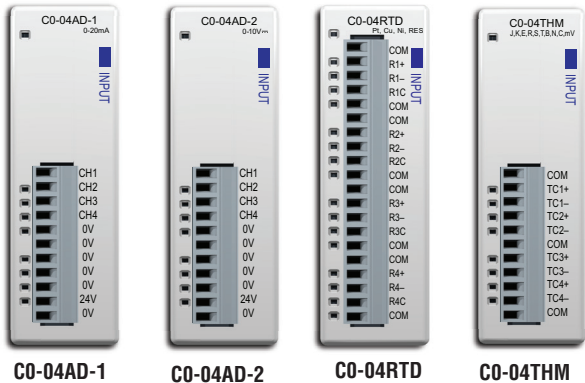


Discrete Combo I/O Modules				
Part Number	Input Type	Input Voltage	Output Type	Output Voltage / Current Ratings
CO-16CDD1	8 DC (source/sink)	24 VDC	8 DC (sink)	5-27 VDC / 0.1 A
CO-16CDD2	8 DC (source/sink)	24 VDC	8 DC (source)	12-24 VDC / 0.1 A
CO-08CDR	4 DC (source/sink)	12-24 VDC	4 (relay)	6.25-24 VDC, 1 A 6-240 VAC, 1 A

Choosing Expansion I/O Modules

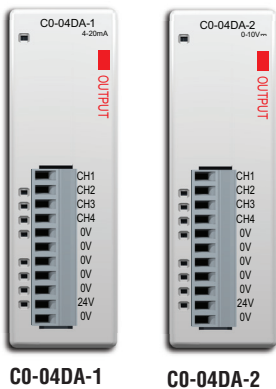
Analog I/O Modules

Analog Input Modules



Analog Input Modules		
Part Number	Analog Input Types	External Power Required
<i>CO-04AD-1</i>	4 channel, current (0-20 mA), 13 bit	24 VDC
<i>CO-04AD-2</i>	4 channel, voltage (0-10 V), 13 bit	24 VDC
<i>CO-04RTD</i>	4 channel RTD input (0.1 degree °C/°F resolution), or resistive input (0 to 3125 ohms)	None
<i>CO-04THM</i>	4 channel thermocouple input (0.1 degree °C/°F resolution), or voltage input (-156.25 mV to 1.25 V), 16 bit	None

Analog Output Modules

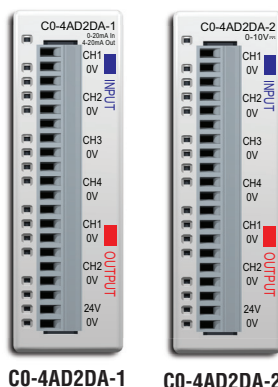


Analog Output Modules		
Part Number	Analog Output Types	External Power Required
<i>CO-04DA-1</i>	4 channel, current sourcing (4-20 mA), 12 bit	24 VDC
<i>CO-04DA-2</i>	4 channel, voltage (0-10 V), 12 bit	24 VDC

Choosing Expansion I/O Modules

Analog I/O Modules (continued)

Analog Combo I/O Modules



C0-4AD2DA-1

C0-4AD2DA-2

Analog Combo I/O Modules			
Part Number	Analog Input Type	Analog Output Type	External Power Required
C0-4AD2DA-1	4 channel, current (0-20 mA), 13 bit	2 channel, current sourcing (4-20 mA), 12 bit	24 VDC
C0-4AD2DA-2	4 channel, voltage (0-10 V), 13 bit	4 channel, voltage (0-10 V), 12 bit	24 VDC

General Specifications For All CLICK PLC Products

These general specifications apply to all CLICK PLCs, optional I/O modules, and optional power supply products. Please refer to the appropriate I/O temperature derating charts under both the PLC and I/O module specifications to determine best operating conditions based on the ambient temperature of your particular application.

General Specifications	
Power Input Voltage Range	20-28 VDC
Maximum Power Consumption	5 W (No 5 V use from communication port)
Maximum Inrush Current	30 A (less than 1ms)
Acceptable External Power Drop	Max 10 ms
Operating Temperature	Analog, analog combo I/O modules only: 32°F to 140°F (0°C to 60°C); All other modules: 32°F to 131°F (0°C to 55°C), IEC 60068-2-14 (Test Nb, Thermal Shock)
Storage Temperature	-4°F to 158°F (-20°C to 70°C) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)
Ambient Humidity	30% to 95% relative humidity (non-condensing)
Environmental Air	No corrosive gases. Environmental pollution level is 2 (UL840)
Vibration	MIL STD 810C, Method 514.2, EC60068-2-6 JIS C60068-2-6 (Sine wave vibration test)
Shock	MIL STD 810C, Method 516.2, IEC60068-2-27, JIS C60068-2-27
Noise Immunity	Comply with NEMA ICS3-304, Impulse noise 1µs, 1000V EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB) EN61000-4-5 (Surge), EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) RFI: No interference measured at 150 and 450 MHz (5w/15cm)
Emissions	EN55011:1998 Class A
Agency Approvals	UL508 (File No. E157382, E316037); CE (EN61131-2)
Other	RoHS

CLICK Specifications

PLC Unit Specifications

Basic, Standard and Analog PLC Unit Specifications			
	Basic PLC	Standard PLC	Analog PLC
Control Method	Stored Program/Cyclic execution method	Stored Program/Cyclic execution method	Stored Program/Cyclic execution method
I/O Numbering System	Fixed in Decimal	Fixed in Decimal	Fixed in Decimal
Ladder Memory (steps)	8000	8000	8000
Total Data Memory (words)	8000	8000	8000
Contact Execution (boolean)	< 0.6us	< 0.6us	< 0.6us
Typical Scan (1k boolean)	1-2 ms	1-2 ms	1-2 ms
RLL Ladder Style Programming	Yes	Yes	Yes
Run Time Edits	No	No	No
Scan	Variable / fixed	Variable / fixed	Variable / fixed
CLICK Programming Software for Windows	Yes	Yes	Yes
Built-in Communication Ports	Yes (two RS-232 ports)	Yes (two RS-232 ports and one RS-485 port)	Yes (two RS-232 ports and one RS-485 port)
FLASH Memory	Standard on PLC	Standard on PLC	Standard on PLC
Built-in Discrete I/O points	8 inputs, 6 outputs	8 inputs, 6 outputs	4 inputs, 4 outputs
Built-in Analog I/O Channels	No	No	2 inputs, 2 outputs
Number of Instructions Available	21	21	21
Control Relays	2000	2000	2000
System Control Relays	1000	1000	1000
Timers	500	500	500
Counters	250	250	250
Interrupt	Yes (external: 8 / timed: 4)	Yes (external: 8 / timed: 4)	Yes (external: 4 / timed: 4)
Subroutines	Yes	Yes	Yes
For/Next Loops	Yes	Yes	Yes
Math (Integer and Hex)	Yes	Yes	Yes
Drum Sequencer Instruction	Yes	Yes	Yes
Internal Diagnostics	Yes	Yes	Yes
Password Security	Yes	Yes	Yes
System Error Log	Yes	Yes	Yes
User Error Log	No	No	No
Memory Backup	Super Capacitor	Super Capacitor + Battery	Super Capacitor + Battery
Battery Backup	No	Yes (battery sold separately; part # D2-BAT-1)	Yes (battery sold separately; part # D2-BAT-1)
Calendar/Clock	No	Yes	Yes
I/O Terminal Block Replacement	ADC p/n C0-16TB	ADC p/n C0-16TB	ADC p/n C0-16TB
Communication Port & Terminal Block Replacement	N/A	ADC p/n C0-3TB	ADC p/n C0-3TB
24 VDC Power Terminal Block Replacement	ADC p/n C0-4TB	ADC p/n C0-4TB	ADC p/n C0-4TB

CLICK Specifications

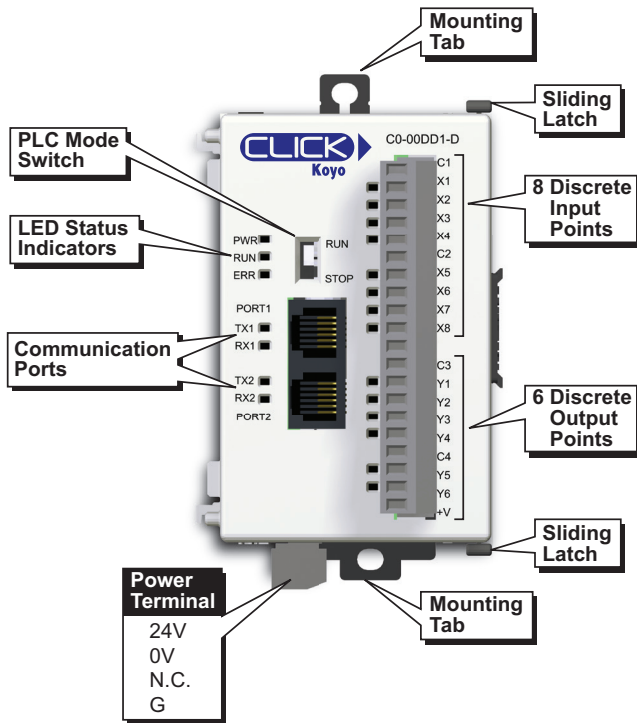
PLC Units Specifications (continued)

Ethernet Basic and Standard PLC Unit Specifications		
	Ethernet Basic PLC	Ethernet Standard PLC
Control Method	Stored Program/Cyclic execution method	Stored Program/Cyclic execution method
I/O Numbering System	Fixed in Decimal	Fixed in Decimal
Ladder Memory (steps)	8000	8000
Total Data Memory (words)	8000	8000
Contact Execution (boolean)	< 0.2us	< 0.2us
Typical Scan (1k boolean)	< 1ms	< 1ms
RLL Ladder Style Programming	Yes	Yes
Run Time Edits	Yes	Yes
Scan	Variable / fixed	Variable / fixed
CLICK Programming Software for Windows	Yes	Yes
Built-in Communication Ports	Yes (one Ethernet port and one RS-232 port)	Yes (one Ethernet port, one RS-232 port and one RS-485 port)
FLASH Memory	Standard on PLC	Standard on PLC
Built-in Discrete I/O points	8 inputs, 6 outputs	8 inputs, 6 outputs
Built-in Analog I/O Channels	No	No
Number of Instructions Available	21	21
Control Relays	2000	2000
System Control Relays	1000	1000
Timers	500	500
Counters	250	250
Interrupt	Yes (external: 8 / timed: 4)	Yes (external: 8 / timed: 4)
Subroutines	Yes	Yes
For/Next Loops	Yes	Yes
Math (Integer and Hex)	Yes	Yes
Drum Sequencer Instruction	Yes	Yes
Internal Diagnostics	Yes	Yes
Password Security	Yes	Yes
System Error Log	Yes	Yes
User Error Log	No	No
Memory Backup	Super Capacitor + Battery	Super Capacitor + Battery
Battery Backup	Yes (battery part # D2-BAT-1)	Yes (battery part # D2-BAT-1)
Calendar/Clock	Yes	Yes
I/O Terminal Block Replacement	ADC p/n C0-16TB	ADC p/n C0-16TB
Communication Port & Terminal Block Replacement	N/A	ADC p/n C0-3TB
24 VDC Power Terminal Block Replacement	ADC p/n C0-4TB	ADC p/n C0-4TB

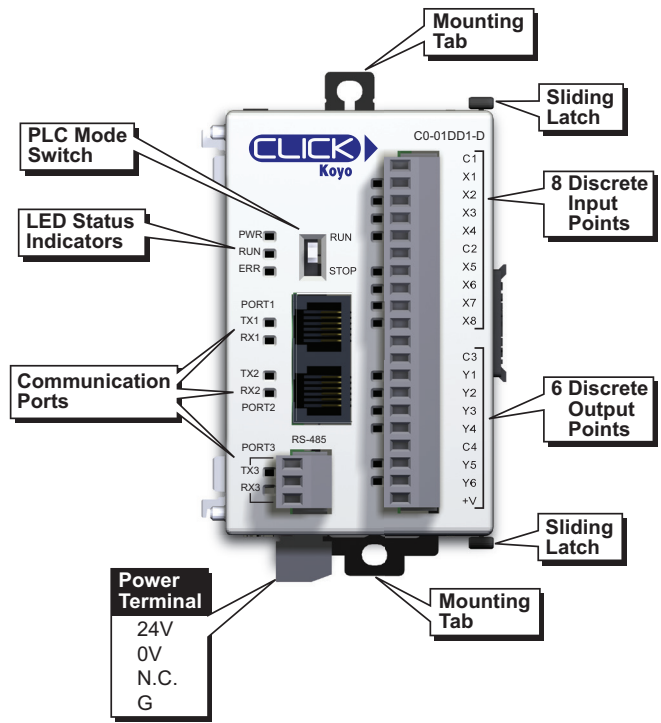
CLICK Specifications

PLC Features

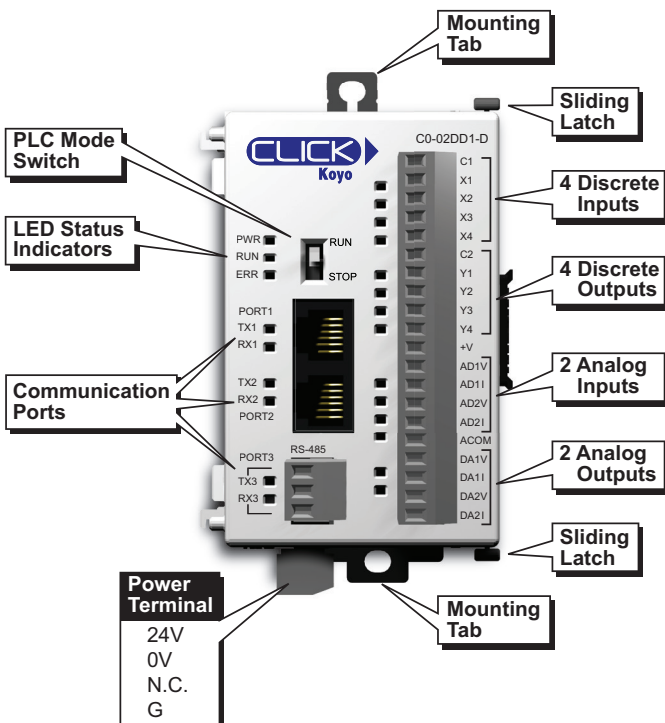
Basic PLCs



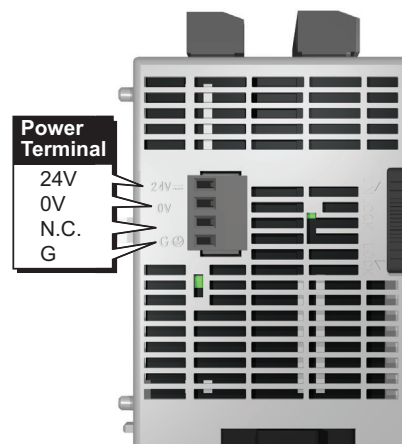
Standard PLCs



Analog PLCs



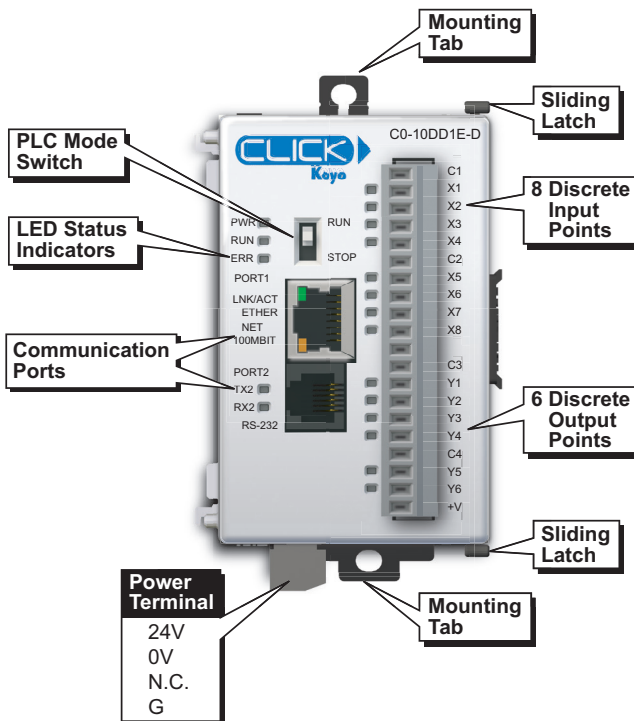
Bottom of PLC (Same on all models)



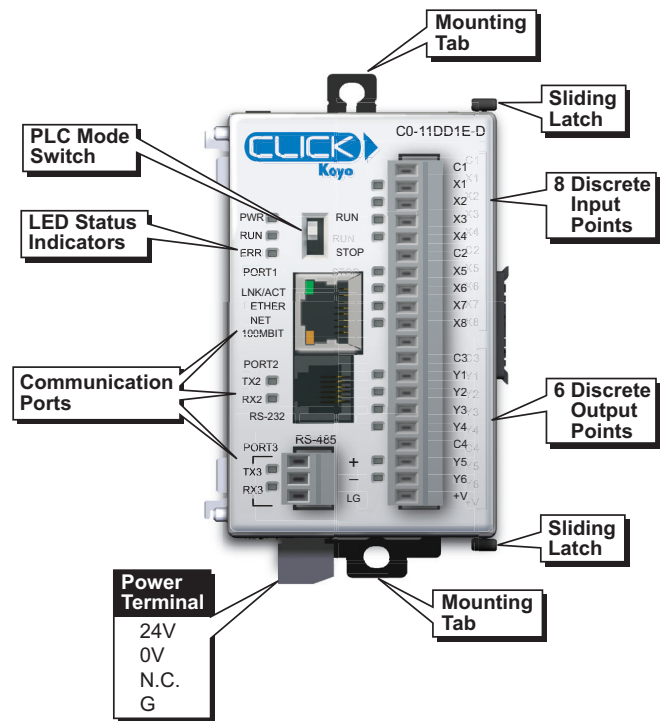
CLICK Specifications

PLC Features (continued)

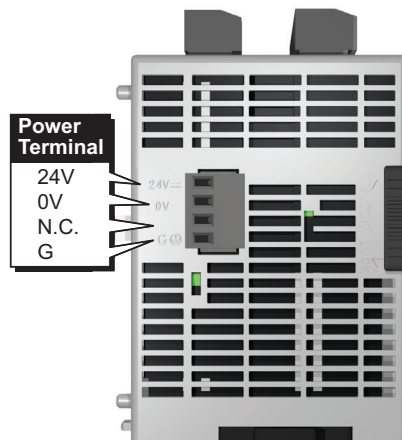
Ethernet Basic PLCs



Ethernet Standard PLCs

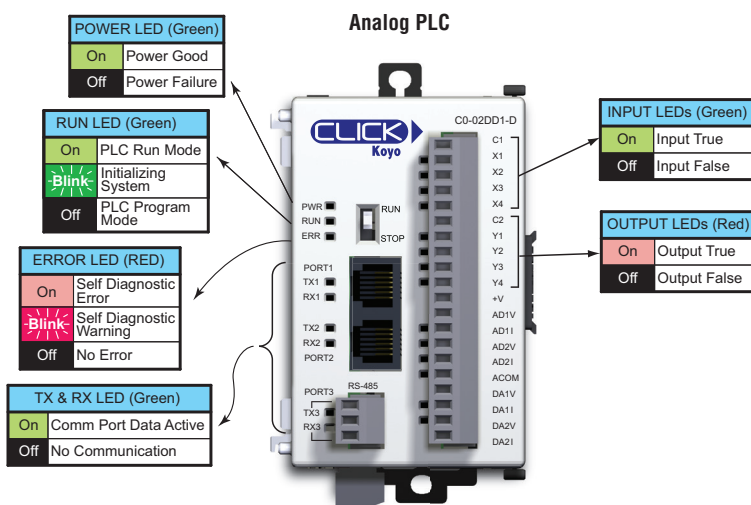
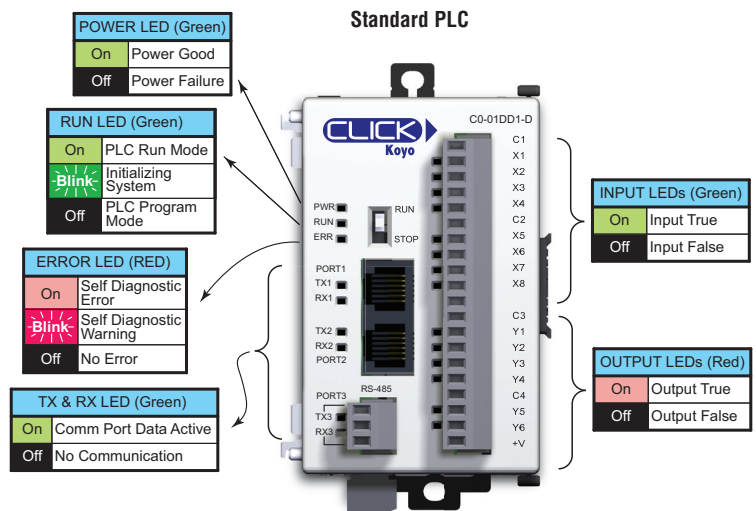
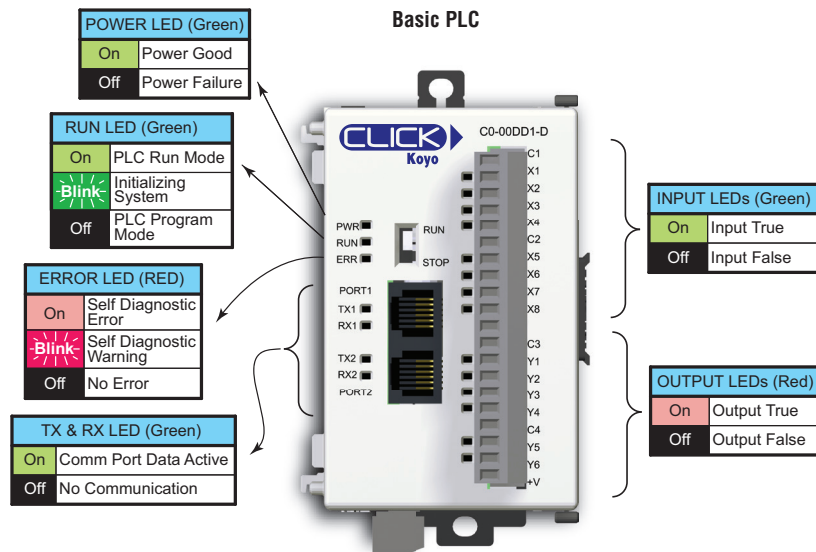


**Bottom of Ethernet PLC
(Same on all models)**



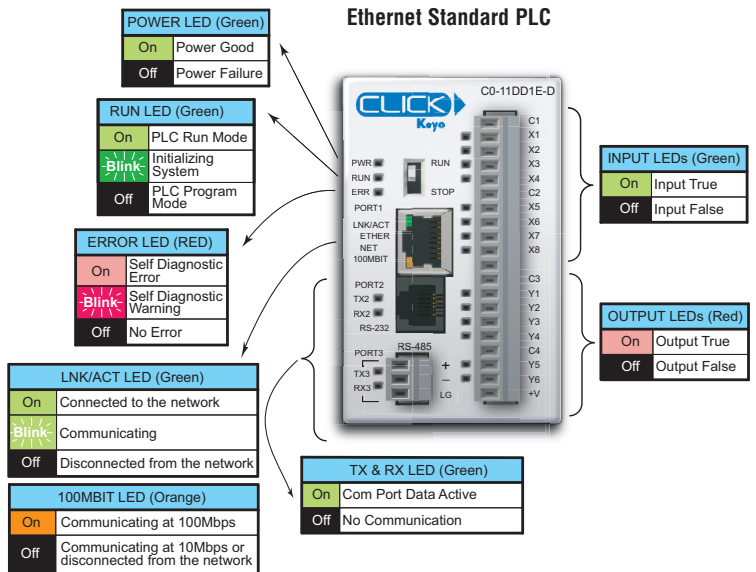
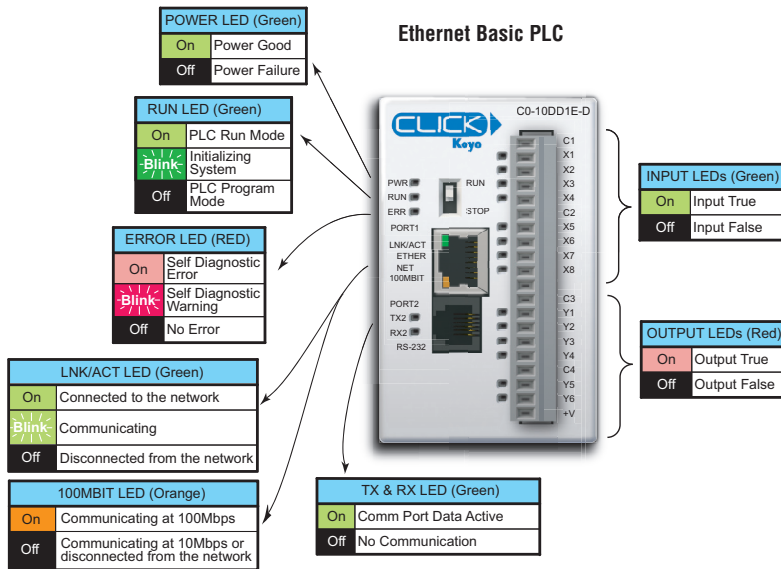
CLICK Specifications

PLC LED Status Indicators



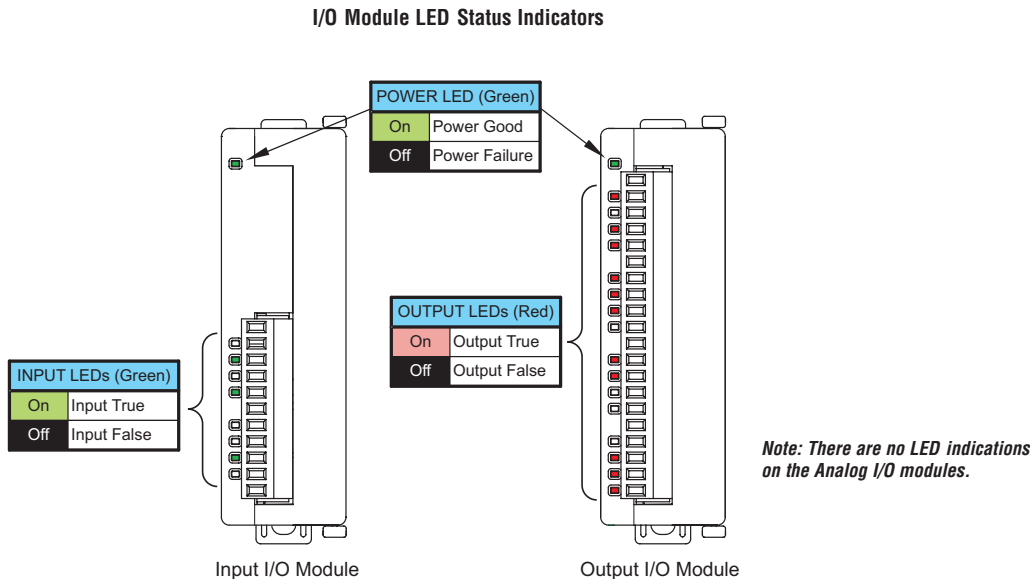
CLICK Specifications

PLC LED Status Indicators



CLICK Specifications

I/O Module LED Status Indicators



I/O Terminal Block Specifications for PLCs and I/O Modules

11-Pin Terminal Block,
CO-8TB

11-pin Terminal Block Specifications	
Connector Type	Pluggable Terminal Block
Number of Pins	11 pt
Pitch	3.50 mm
Wire Range	28-16 AWG
Wire Strip Length	7 mm
Screw Size	M2.0
Screw Torque	Analog, analog combo I/O modules only: 1.7 lb-in; All other modules: 2.0 to 2.2 lb-in
ADC Part Number	CO-8TB

20-Pin Terminal Block,
CO-16TB

20-pin Terminal Block Specifications	
Connector Type	Pluggable Terminal Block
Number of Pins	20 pt
Pitch	3.50 mm
Wire Range	28-16 AWG
Wire Strip Length	7 mm
Screw Size	M2.0
Screw Torque	Analog, analog combo I/O modules only: 1.7 lb-in; All other modules: 2.0 to 2.2 lb-in
ADC Part Number	CO-16TB



Wiring System for CLICK PLCs

Wiring Solutions using the ZIPLink Wiring System

ZIPLinks eliminate the normally tedious process of wiring between devices by utilizing prewired cables and DIN rail mount connector modules. It's as simple as plugging in a cable connector at either end or terminating wires at only one end. Prewired cables keep installation clean and efficient, using half the space at a fraction of the cost of standard terminal blocks.

ZIPLinks are available in a variety of styles to suit your needs, including feedthrough connector module. ZIPLinks are available for all Basic, Standard and Ethernet CLICK PLC units and most discrete and analog I/O modules. Pre-printed I/O-specific adhesive label strips for quick marking of ZIPLink modules are provided with ZIPLink cables.



Solution 1: CLICK PLC and I/O Modules to ZIPLink Connector Modules

When looking for quick and easy I/O-to-field termination, a ZIPLink connector module used in conjunction with a prewired ZIPLink cable, consisting of an I/O terminal block at one end and a multi-pin connector at the other end, is the best solution.

Use the "CLICK PLC Unit ZIPLink Selector" table and CLICK I/O ZIPLink selector tables located in this section:

1. Locate your PLC or I/O module.
2. Select a ZIPLink Module.
3. Select a corresponding ZIPLink Cable.

Solution 2: CLICK PLC and I/O Modules to 3rd Party Devices

When wanting to connect I/O to another device within close proximity of the I/O modules, no extra terminal blocks are necessary when using the ZIPLink Pigtail Cables. ZIPLink Pigtail Cables are prewired to an I/O terminal block with color-coded pigtail with soldered-tip wires on the other end.

Use the I/O Modules to 3rd Party Devices selector tables located in the ZIPLink section:

1. Locate your PLC or I/O module.
2. Select a ZIPLink Pigtail Cable that is compatible with your 3rd party device.



Solution 3: GS Series and DuraPulse Drives Communication Cables

Need to communicate via Modbus RTU to a drive or a network of drives?

ZIPLink cables are available in a wide range of configurations for connecting to PLCs and SureServo, SureStep, Stellar Soft Starter and AC drives. Add a ZIPLink communications module to quickly and easily set up a multi-device network.

Use the Drives Communication selector tables located in the ZIPLink section:

1. Locate your Drive and type of communications.
2. Select a ZIPLink cable and other associated hardware.



Solution 4: Serial Communications Cables

ZIPLink offers communications cables for use with CLICK PLCs that can also be used with other communications devices. Connections include a 6-pin RJ12 connector which can be used in conjunction with the RJ12 Feedthrough module.

Use the Serial Communications Cables selector table located in the ZIPLink section:

1. Locate your connector type
2. Select a cable.





Wiring System for CLICK PLCs

Company
InformationControl Systems
Overview

CLICK PLC

Do-More
PLCs OverviewDo-More H2
PLCDo-More T1H
PLCDirectLOGIC
PLCs OverviewDirectLOGIC
DL05/06DirectLOGIC
DL105DirectLOGIC
DL205DirectLOGIC
DL305DirectLOGIC
DL405Productivity
2000Productivity
3000Universal
Field I/O

Software

C-More
HMIC-More Micro
HMIViewMarq
Industrial
Marquees

Other HMI

Communications

Appendix
Book 1Terms and
Conditions

CLICK PLC ZIPLink Selector				
PLC		ZIPLink		
PLC Unit	# of Terms	Component	Module Part No.	Cable Part No.
CO-00DD1-D	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *
CO-00DD2-D				
CO-00DR-D				
CO-00AR-D				
CO-01DD1-D				
CO-01DD2-D				
CO-01DR-D				
CO-01AR-D				
CO-10DD1E-D				
CO-10DD2E-D				
CO-10DRE-D				
CO-10ARE-D				
CO-11DD1E-D				
CO-11DD2E-D				
CO-11DRE-D				
CO-11ARE-D				
CO-02DD1-D	20	No ZIPLinks are available for analog PLC Units.		
CO-02DD2-D				
CO-02DR-D				

CLICK PLC Discrete Input Module ZIPLink Selector				
I/O Module		ZIPLink		
Input Module	# of Terms	Component	Module Part No.	Cable Part No.
CO-08ND3	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *
CO-08ND3-1				
CO-08NE3				
CO-08NA				
CO-16ND3	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *
		Sensor	ZL-LTB16-24	
CO-16NE3	20	Feedthrough	ZL-RTB20	
		Sensor	ZL-LTB16-24	

¹ Note: The CO-04TRS relay output is derated not to exceed 2A per point maximum when used with the ZIPLink wiring system.

² Note: Fuses (5 x 20 mm) are not included. See Edison Electronic Fuse section for (5 x 20 mm) fuse. S500 and GMA electronic circuit protection for fast-acting maximum protection. S506 and GMC electronic circuit protection for time-delay performance. Ideal for inductive circuits. To ensure proper operation, do not exceed the voltage and current rating of ZIPLink module. ZL-RFU20 = 2A per circuit.

CLICK PLC Discrete Output Module ZIPLink Selector				
I/O Module		ZIPLink		
Output Module	# of Terms	Component	Module Part No.	Cable Part No.
CO-08TD1	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *
CO-08TD2				
CO-08TR				
CO-08TA				
CO-16TD1	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *
		Fuse	ZL-RFU20 ²	
		Relay (sinking)	ZL-RL16-24-1	
CO-16TD2	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *
		Fuse	ZL-RFU20 ²	
		Relay (sourcing)	ZL-RL16-24-2	
CO-04TRS ¹	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *

CLICK PLC Combo I/O Module ZIPLink Selector				
I/O Module		ZIPLink		
Combo Module	# of Terms	Component	Module Part No.	Cable Part No.
CO-16CDD1	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *
CO-16CDD2				
CO-08CDR	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *

CLICK PLC Analog I/O Module ZIPLink Selector				
I/O Module		ZIPLink		
Analog Module	# of Terms	Component	Module Part No.	Cable Part No.
CO-04AD-1	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *
CO-04AD-2	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *
CO-04RTD	20	No ZIPLinks are available for RTD and thermocouple modules.		
CO-04THM	11			
CO-04DA-1	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *
CO-04DA-2	11	Feedthrough	ZL-RTB20	ZL-CO-CBL11 *
CO-4AD2DA-1	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *
CO-4AD2DA-2	20	Feedthrough	ZL-RTB20	ZL-CO-CBL20 *

* Select the cable length by replacing the * with: Blank = 0.5m, -1 = 1.0m, or -2 = 2.0m.